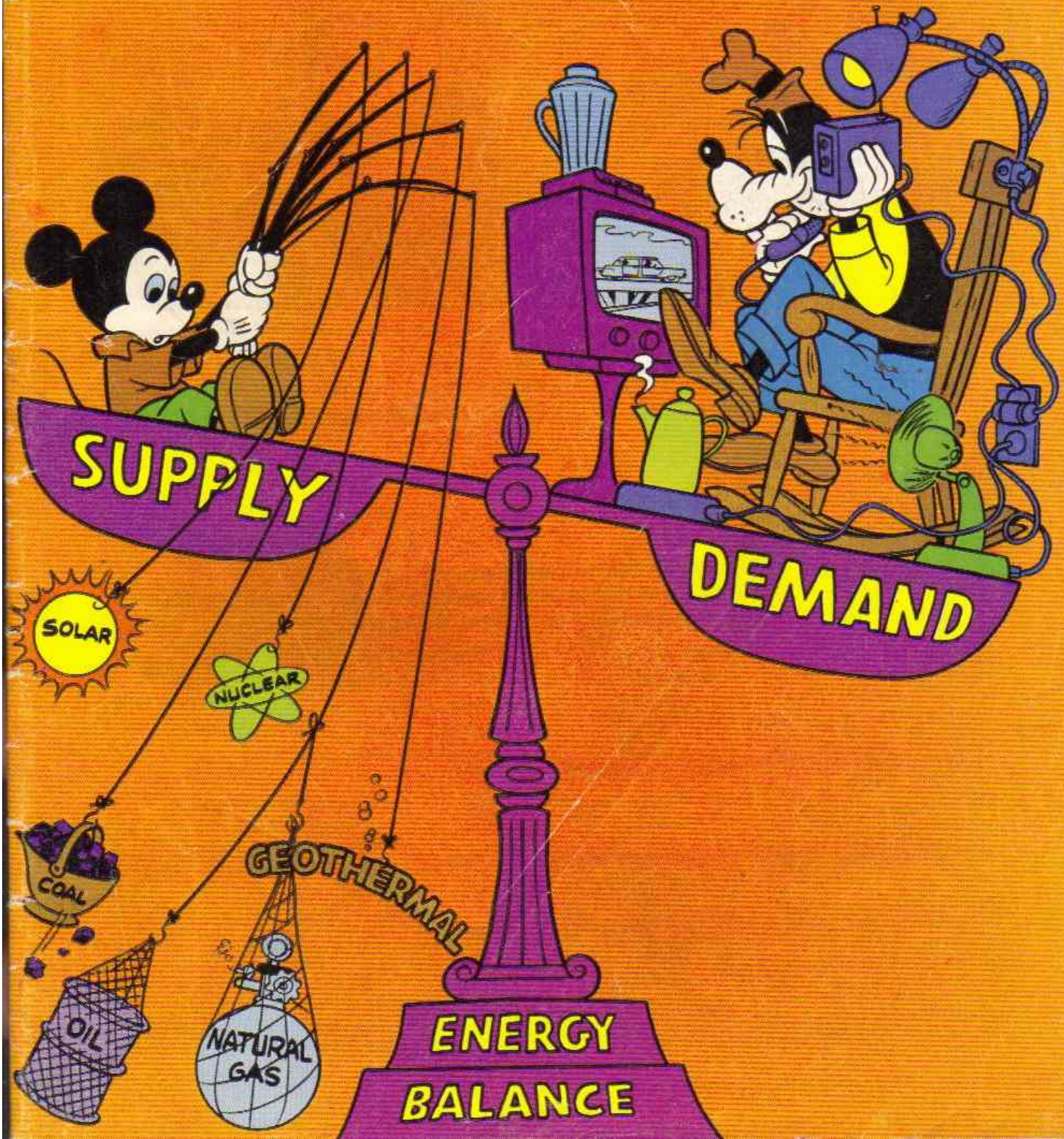
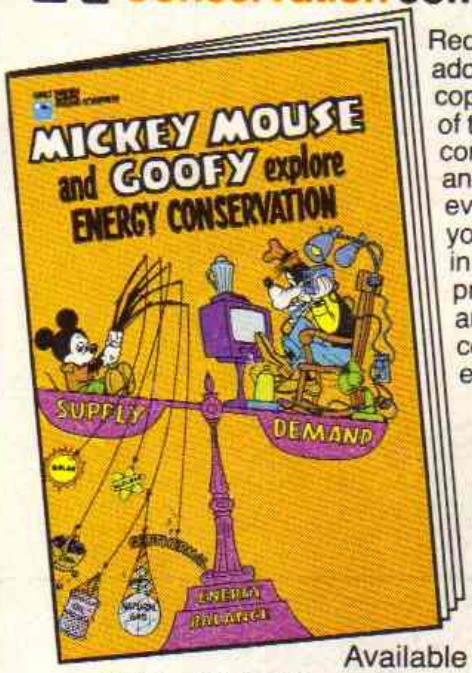
WALT DISNEY EDUCATIONAL MEDIA COMPANY

MICKEY MOUSE and GOOFY explore ENERGY CONSERVATION



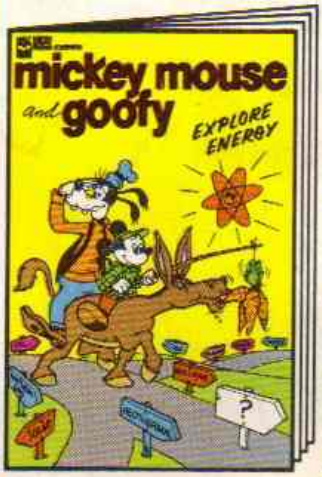
Now you can use these three proven resources in your energy-awareness program.

1. Mickey Mouse and Goofy Explore Energy Conservation comic book



Request additional copies of this comic book and make every youngster in your program an "energy conservation" expert!

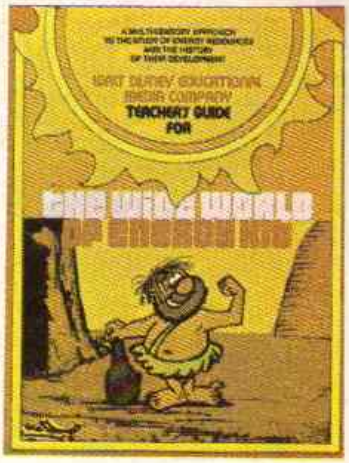
2. Mickey Mouse and Goofy Explore Energy comic book



Mickey and Goofy lead a search through the ages for new sources of energy and better ways of using it. The comic book also contains an easy-to-understand Time-Line chart of the development of energy, examples of perpetual motion machines, a diagram showing how nuclear reactors produce energy—and a chart depicting energy consumption for America's first 200 years.

Available in limited quantities without charge:
Public Affairs Department: *EXXON, U.S.A., P.O. Box 2180, Houston, Texas 77001*

3. *The Wide World of Energy Multimedia Kit*



The complete Wide World of Energy Multimedia Kit includes an idea-packed teacher's guide with a wide variety of teaching, support, and reinforcement activities. For upper elementary and junior high classes. ***Price $119.***

A self-contained learning lab that explores the many facets of the complex energy issue. Includes a comprehensive collection of teaching materials—

- color and sound filmstrip, "The Search for Power and Energy."
- 18 full-color study prints—13″ x 18″—created by Disney artists.
- a fascinating Energy game that reinforces the concepts in the filmstrip and study prints...makes learning more fun than ever!
- 30 copies of the Energy Comic Book, MICKEY MOUSE AND GOOFY EXPLORE ENERGY.
- 10 different classroom Energy Activity Cards for easy energy experiments.

For more information on the kit, write to:

WALT DISNEY EDUCATIONAL MEDIA COMPANY
500 South Buena Vista Street
Burbank, California 91521

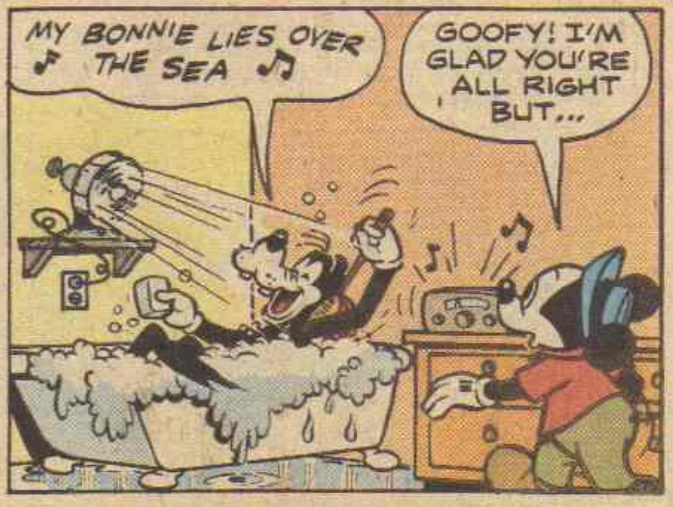
Production assistance provided by EXXON, U.S.A.

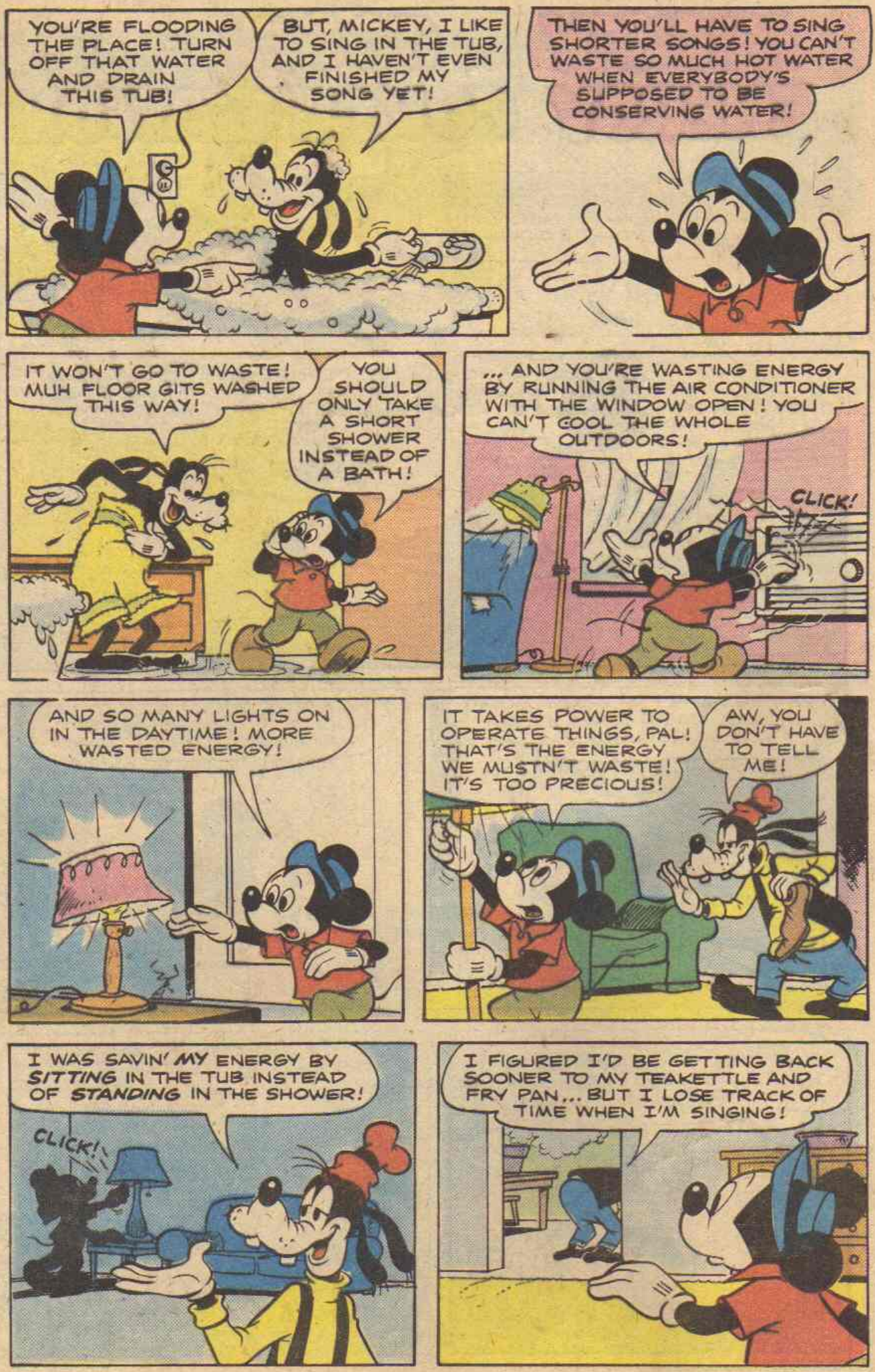
All rights reserved throughout the world. Nothing herein contained to be reproduced without permission of Walt Disney Educational Media Company Authorized Edition

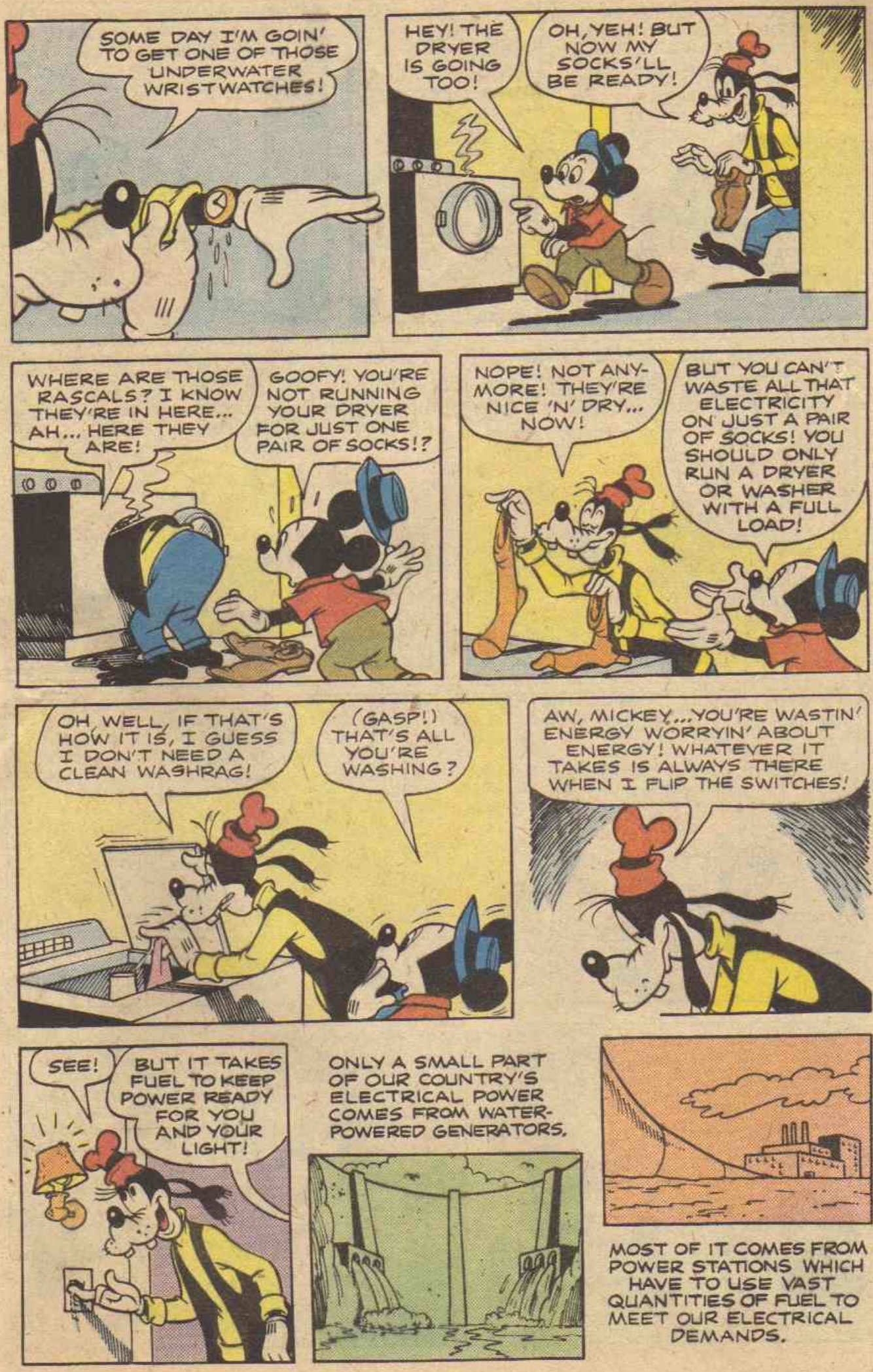
WDEMCO 204, © MCMLXXVIII, Walt Disney Productions

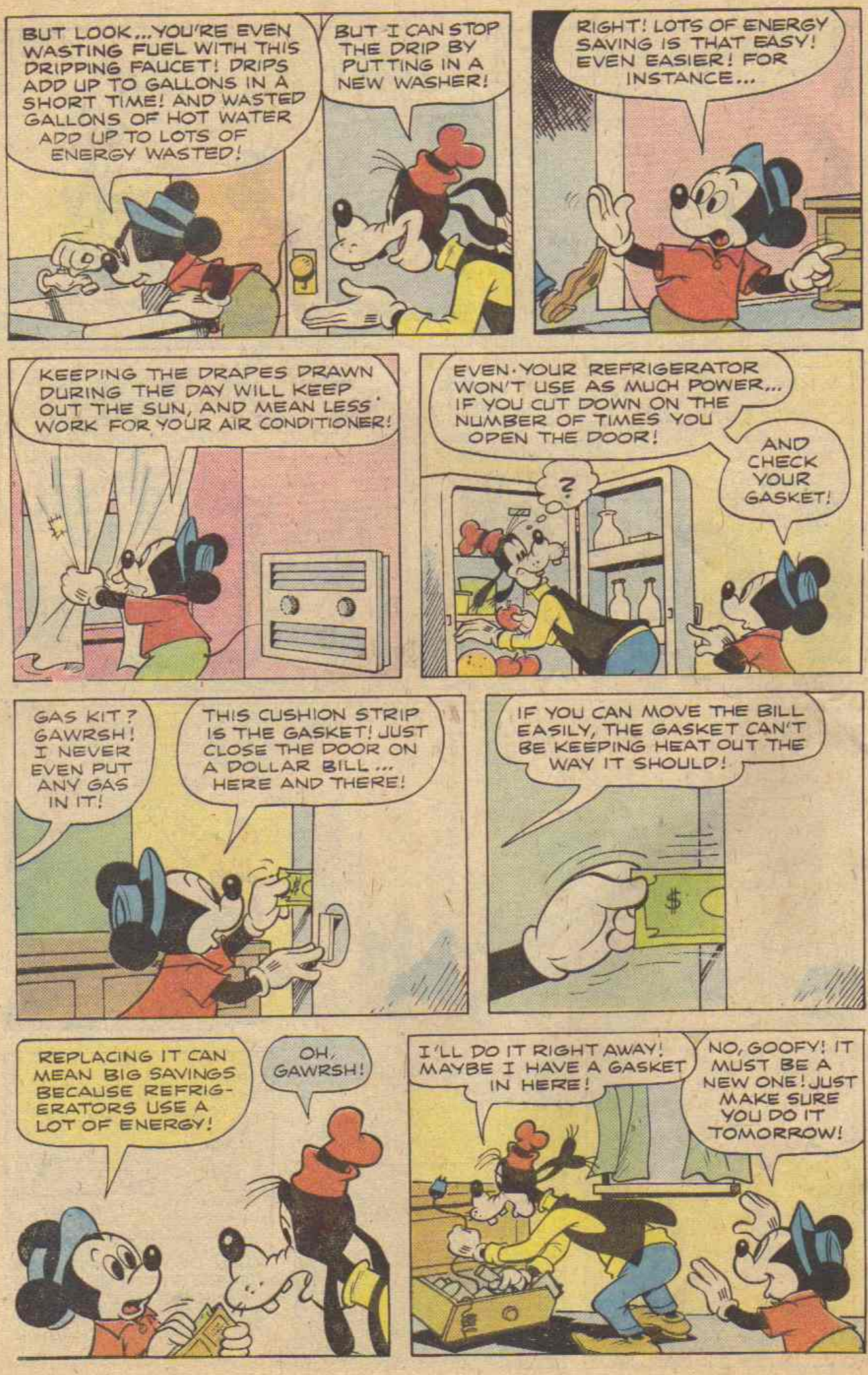
Printed in U.S.A.

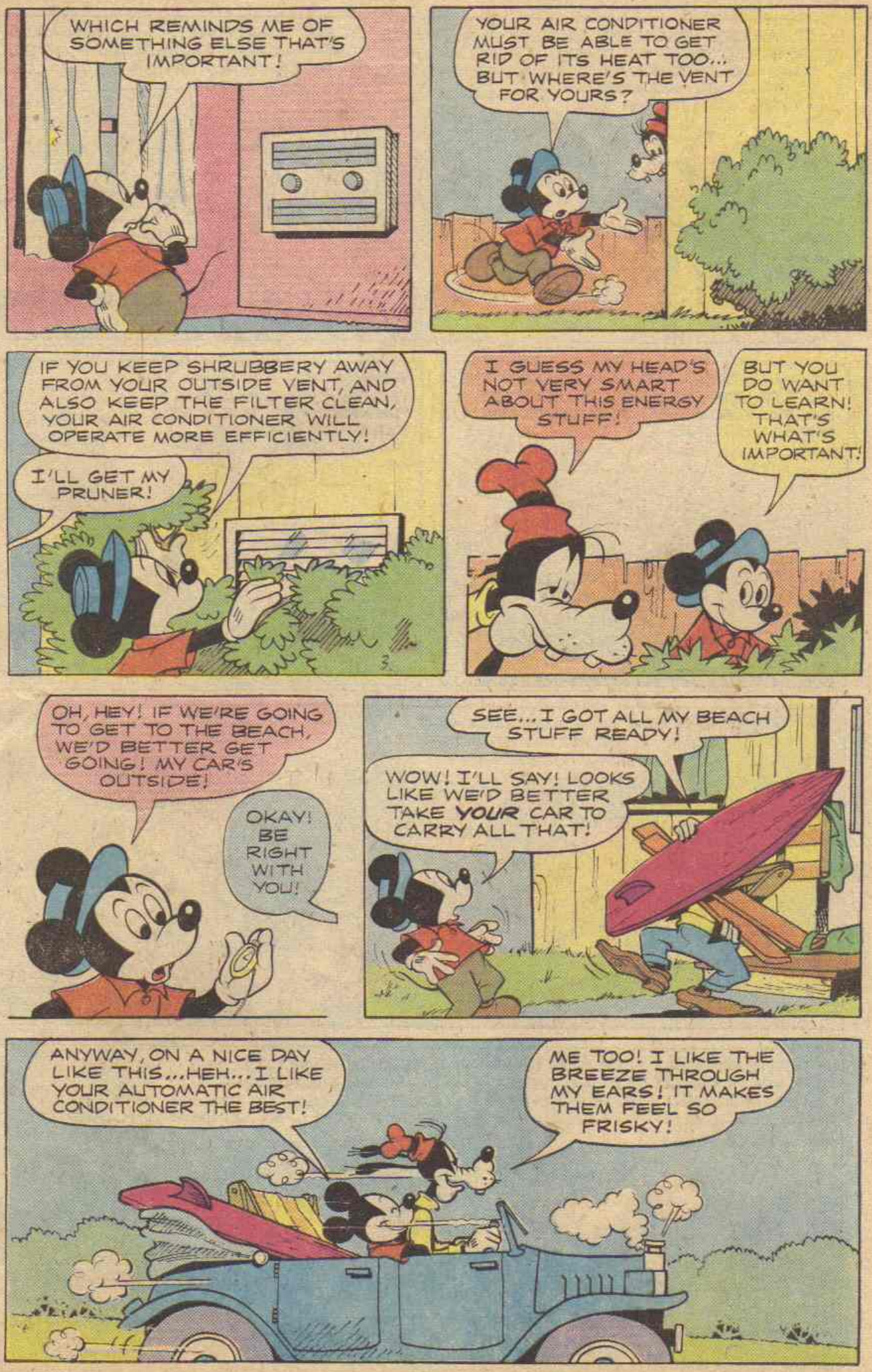
MICKEY and GOOFY Explore ENERGY CONSERVATION

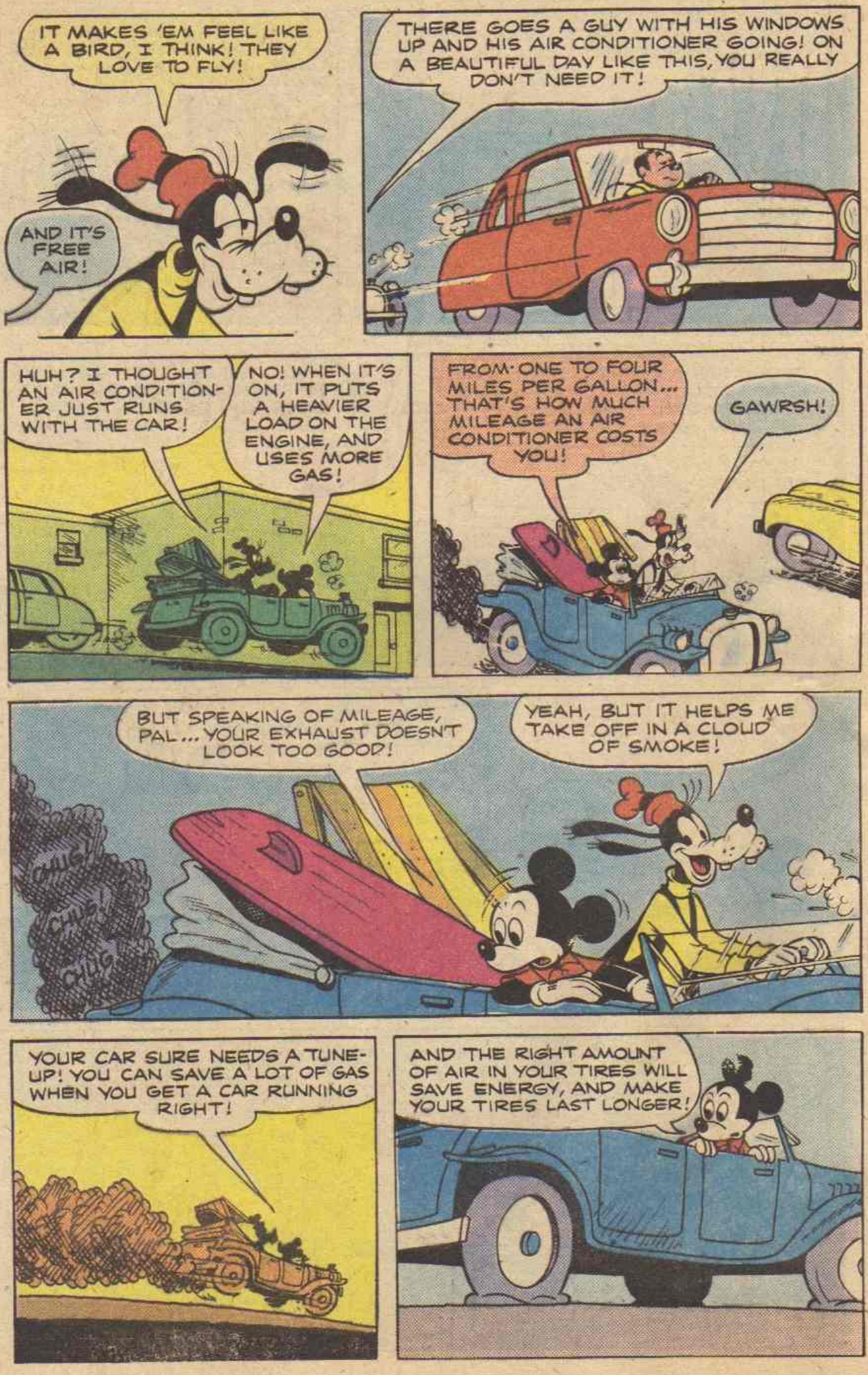



YOU'RE FLOODING THE PLACE! TURN OFF THAT WATER AND DRAIN THIS TUB!
BUT, MICKEY, I LIKE TO SING IN THE TUB, AND I HAVEN'T EVEN FINISHED MY SONG YET!
THEN YOU'LL HAVE TO SING SHORTER SONGS! YOU CAN'T WASTE SO MUCH HOT WATER WHEN EVERYBODY'S SUPPOSED TO BE CONSERVING WATER!
IT WON'T GO TO WASTE! MUH FLOOR GITS WASHED THIS WAY!
YOU SHOULD ONLY TAKE A SHORT SHOWER INSTEAD OF A BATH!
... AND YOU'RE WASTING ENERGY BY RUNNING THE AIR CONDITIONER WITH THE WINDOW OPEN! YOU CAN'T COOL THE WHOLE OUTDOORS!
CLICK!
AND SO MANY LIGHTS ON IN THE DAYTIME! MORE WASTED ENERGY!
IT TAKES POWER TO OPERATE THINGS, PAL! THAT'S THE ENERGY WE MUSTN'T WASTE! IT'S TOO PRECIOUS!
AW, YOU DON'T HAVE TO TELL ME!
I WAS SAVIN' MY ENERGY BY SITTING IN THE TUB INSTEAD OF STANDING IN THE SHOWER!
CLICK!
I FIGURED I'D BE GETTING BACK SOONER TO MY TEAKETTLE AND FRY PAN... BUT I LOSE TRACK OF TIME WHEN I'M SINGING!

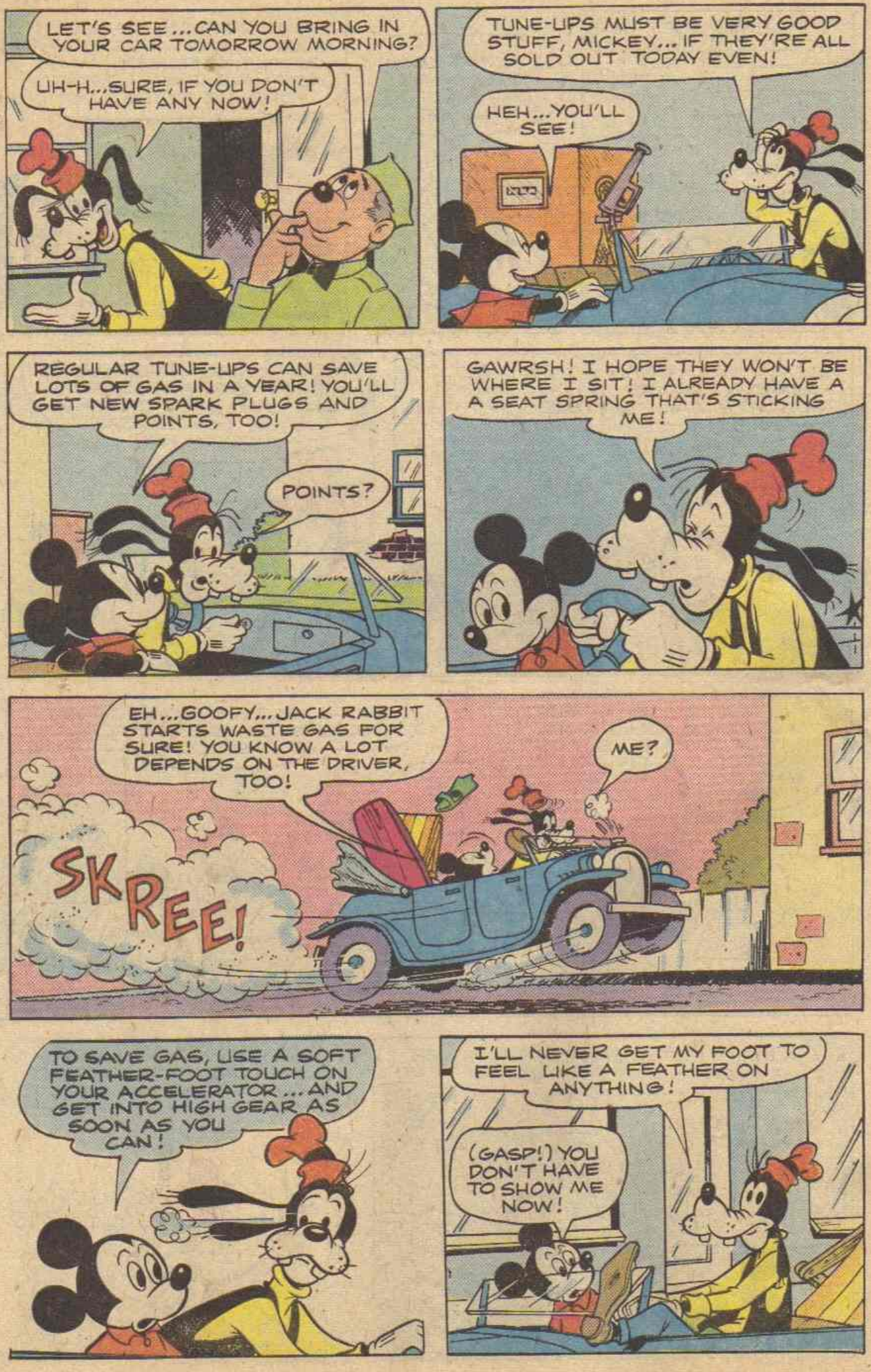

SOME DAY I'M GOIN' TO GET ONE OF THOSE UNDERWATER WRISTWATCHES!
HEY! THE DRYER IS GOING TOO!
OH, YEH! BUT NOW MY SOCKS'LL BE READY!
WHERE ARE THOSE RASCALS? I KNOW THEY'RE IN HERE... AH... HERE THEY ARE!
GOOFY! YOU'RE NOT RUNNING YOUR DRYER FOR JUST ONE PAIR OF SOCKS!?
NOPE! NOT ANY-MORE! THEY'RE NICE 'N' DRY... NOW!
BUT YOU CAN'T WASTE ALL THAT ELECTRICITY ON JUST A PAIR OF SOCKS! YOU SHOULD ONLY RUN A DRYER OR WASHER WITH A FULL LOAD!
OH WELL, IF THAT'S HOW IT IS, I GUESS I DON'T NEED A CLEAN WASHRAG!
(GASP!) THAT'S ALL YOU'RE WASHING?
AW, MICKEY... YOU'RE WASTIN' ENERGY WORRYIN' ABOUT ENERGY! WHATEVER IT TAKES IS ALWAYS THERE WHEN I FLIP THE SWITCHES!
SEE!
BUT IT TAKES FUEL TO KEEP POWER READY FOR YOU AND YOUR LIGHT!
ONLY A SMALL PART OF OUR COUNTRY'S ELECTRICAL POWER COMES FROM WATER-POWERED GENERATORS.
MOST OF IT COMES FROM POWER STATIONS WHICH HAVE TO USE VAST QUANTITIES OF FUEL TO MEET OUR ELECTRICAL DEMANDS.


BUT LOOK... YOU'RE EVEN WASTING FUEL WITH THIS DRIPPING FAUCET! DRIPS ADD UP TO GALLONS IN A SHORT TIME! AND WASTED GALLONS OF HOT WATER ADD UP TO LOTS OF ENERGY WASTED!
BUT I CAN STOP THE DRIP BY PUTTING IN A NEW WASHER!
RIGHT! LOTS OF ENERGY SAVING IS THAT EASY! EVEN EASIER! FOR INSTANCE...
KEEPING THE DRAPES DRAWN DURING THE DAY WILL KEEP OUT THE SUN, AND MEAN LESS WORK FOR YOUR AIR CONDITIONER!
EVEN YOUR REFRIGERATOR WON'T USE AS MUCH POWER... IF YOU CUT DOWN ON THE NUMBER OF TIMES YOU OPEN THE DOOR!
AND CHECK YOUR GASKET!
?
GAS KIT? GAWRSH! I NEVER EVEN PUT ANY GAS IN IT!
THIS CUSHION STRIP IS THE GASKET! JUST CLOSE THE DOOR ON A DOLLAR BILL ... HERE AND THERE!
IF YOU CAN MOVE THE BILL EASILY, THE GASKET CAN'T BE KEEPING HEAT OUT THE WAY IT SHOULD!
$
REPLACING IT CAN MEAN BIG SAVINGS BECAUSE REFRIGERATORS USE A LOT OF ENERGY!
OH, GAWRSH!
I'LL DO IT RIGHT AWAY! MAYBE I HAVE A GASKET IN HERE!
NO, GOOFY! IT MUST BE A NEW ONE! JUST MAKE SURE YOU DO IT TOMORROW!


WHICH REMINDS ME OF SOMETHING ELSE THAT'S IMPORTANT!
YOUR AIR CONDITIONER MUST BE ABLE TO GET RID OF ITS HEAT TOO... BUT WHERE'S THE VENT FOR YOURS?
IF YOU KEEP SHRUBBERY AWAY FROM YOUR OUTSIDE VENT, AND ALSO KEEP THE FILTER CLEAN, YOUR AIR CONDITIONER WILL OPERATE MORE EFFICIENTLY!
I'LL GET MY PRUNER!
I GUESS MY HEAD'S NOT VERY SMART ABOUT THIS ENERGY STUFF!
BUT YOU DO WANT TO LEARN! THAT'S WHAT'S IMPORTANT!
OH, HEY! IF WE'RE GOING TO GET TO THE BEACH, WE'D BETTER GET GOING! MY CAR'S OUTSIDE!
OKAY! BE RIGHT WITH YOU!
SEE... I GOT ALL MY BEACH STUFF READY!
WOW! I'LL SAY! LOOKS LIKE WE'D BETTER TAKE YOUR CAR TO CARRY ALL THAT!
ANYWAY, ON A NICE DAY LIKE THIS... HEH... I LIKE YOUR AUTOMATIC AIR CONDITIONER THE BEST!
ME TOO! I LIKE THE BREEZE THROUGH MY EARS! IT MAKES THEM FEEL SO FRISKY!

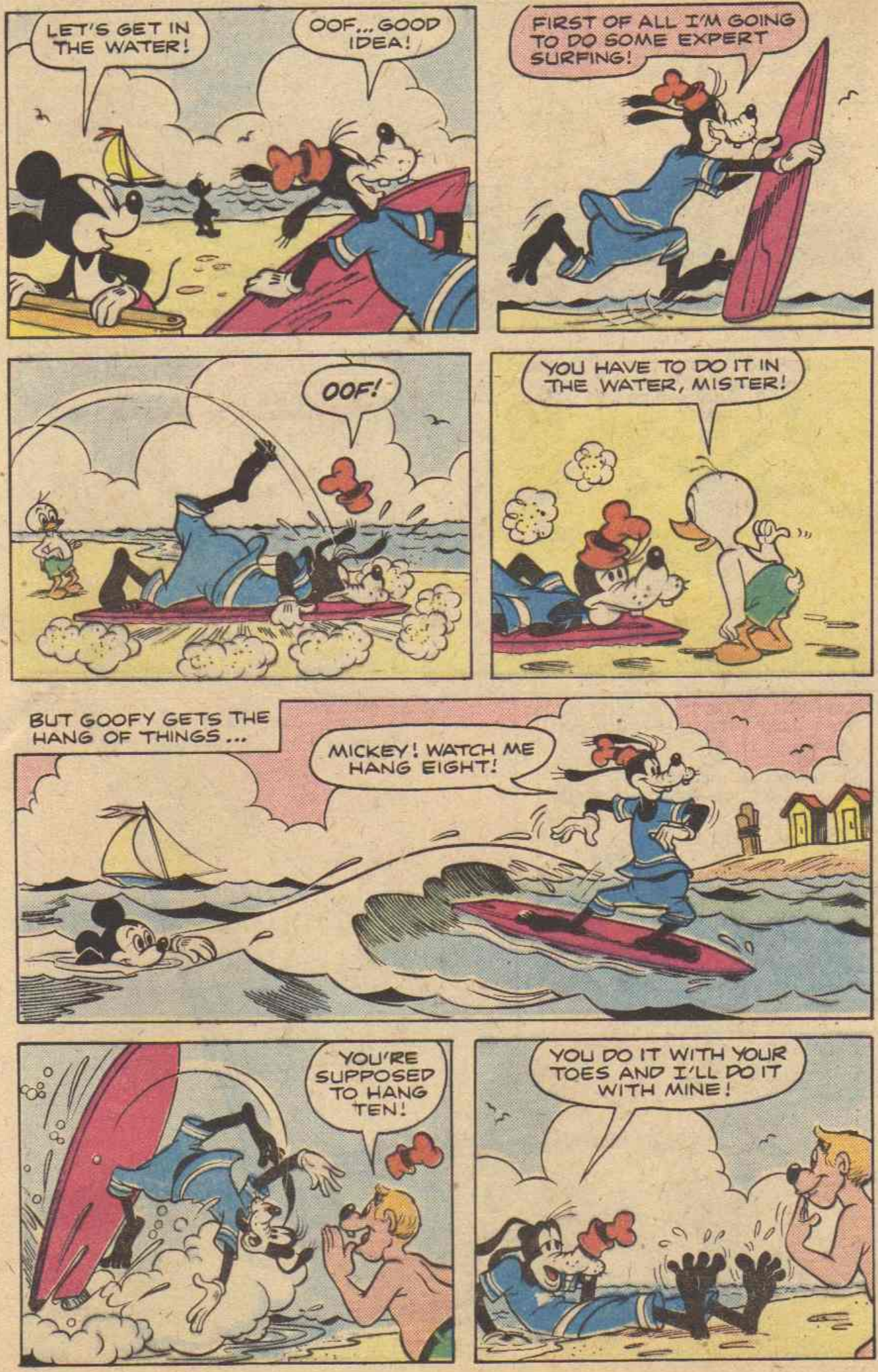

IT MAKES 'EM FEEL LIKE A BIRD, I THINK! THEY LOVE TO FLY!
AND IT'S FREE AIR!
THERE GOES A GUY WITH HIS WINDOWS UP AND HIS AIR CONDITIONER GOING! ON A BEAUTIFUL DAY LIKE THIS, YOU REALLY DON'T NEED IT!
HUH? I THOUGHT AN AIR CONDITIONER JUST RUNS WITH THE CAR!
NO! WHEN IT'S ON, IT PUTS A HEAVIER LOAD ON THE ENGINE, AND USES MORE GAS!
FROM ONE TO FOUR MILES PER GALLON... THAT'S HOW MUCH MILEAGE AN AIR CONDITIONER COSTS YOU!
GAWRSH!
BUT SPEAKING OF MILEAGE, PAL... YOUR EXHAUST DOESN'T LOOK TOO GOOD!
YEAH, BUT IT HELPS ME TAKE OFF IN A CLOUD OF SMOKE!
CHUG!
CHUG!
CHUG
YOUR CAR SURE NEEDS A TUNE-UP! YOU CAN SAVE A LOT OF GAS WHEN YOU GET A CAR RUNNING RIGHT!
AND THE RIGHT AMOUNT OF AIR IN YOUR TIRES WILL SAVE ENERGY, AND MAKE YOUR TIRES LAST LONGER!

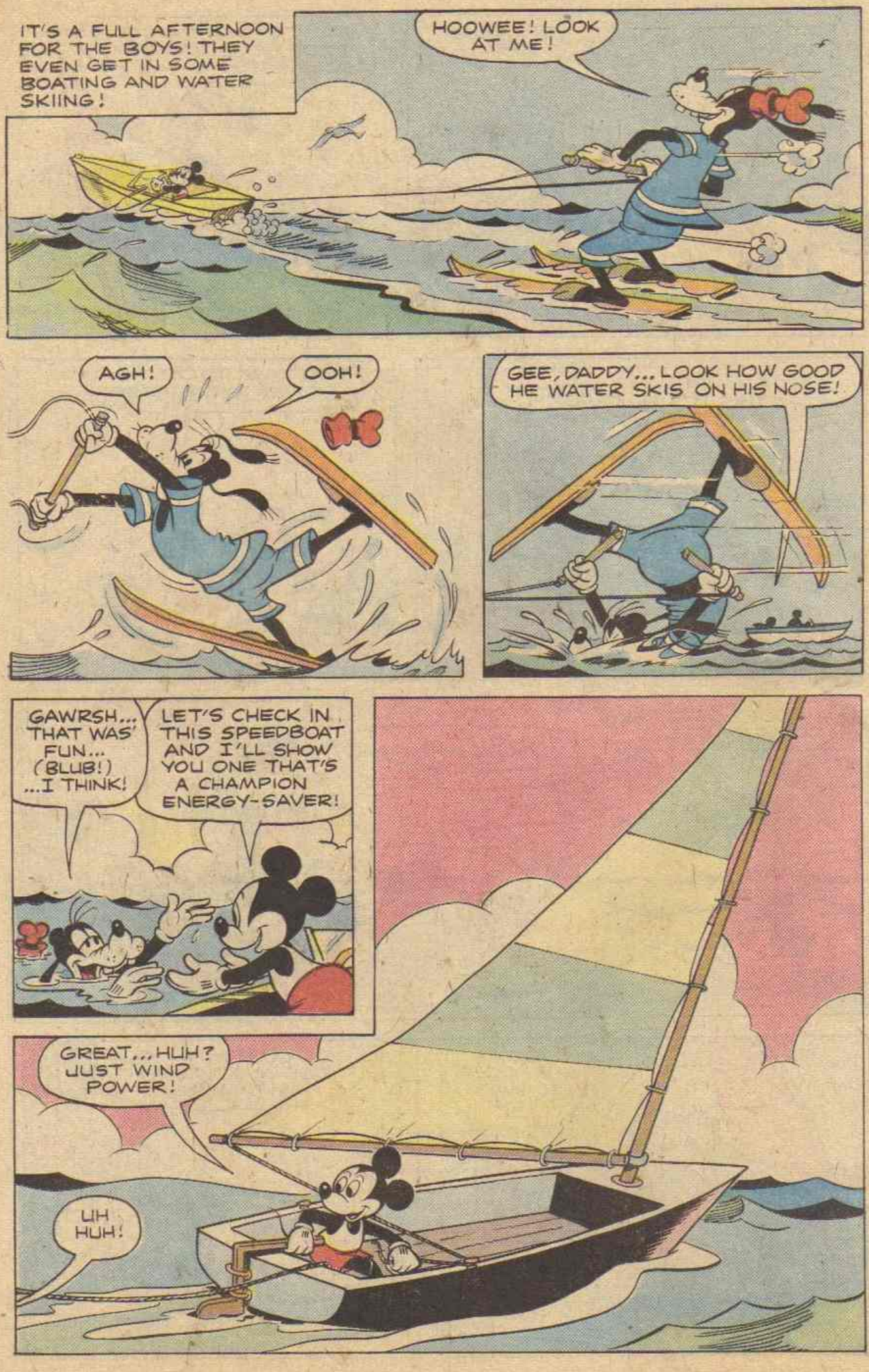
I FIGURED SOFT TIRES WOULD GIVE ME A NICE SOFT RIDE!
RADIAL TIRES GIVE A SOFTER RIDE AND THEY SAVE GAS!
I DIDN'T KNOW THEY MADE TIRES OUT OF RADIOS!
THIS TANKFUL'S ON ME, GOOFY... AND WHILE THEY'RE CHECKING YOUR OIL, WHY NOT HAVE THEM LOOK AT YOUR AIR FILTER, TOO!
GAS & OIL
YES, I'D SAY A CLEAN FILTER WOULD BE A WISE MOVE, SIR!
UM-M... WELL, THAT ONE'S BEEN IN THERE ONLY TWO OR THREE YEARS... BUT IF YOU SAY SO, OKAY!
GOOFY! AIR FILTERS SHOULD BE CHANGED REGULARLY! CARS RUN BEST ON A MIXTURE OF GASOLINE AND CLEAN AIR!
THE FILTER STRAINS DUST AND OTHER POLLUTANTS OUT OF THE AIR... BUT ON A REGULAR BASIS, YOU HAVE TO GET RID OF WHAT IT COLLECTS!
GEE, THAT'S INTERESTING ...I THINK!
OR THE AIR CAN'T FLOW INTO THE CARBURETOR AS SMOOTHLY AS IT SHOULD!
GAS
A DIRTY FILTER CAN COST A DRIVER AS MUCH AS EIGHTY GALLONS A YEAR!
ANOTHER WAY YOU CAN SAVE MILEAGE IS BY USING ONE OF THOSE NEW ENERGY-SAVING MOTOR OILS!
I'M CONVINCED! I'LL EVEN TAKE ONE OF THOSE TUNE-UPS MICKEY TALKS ABOUT!
?

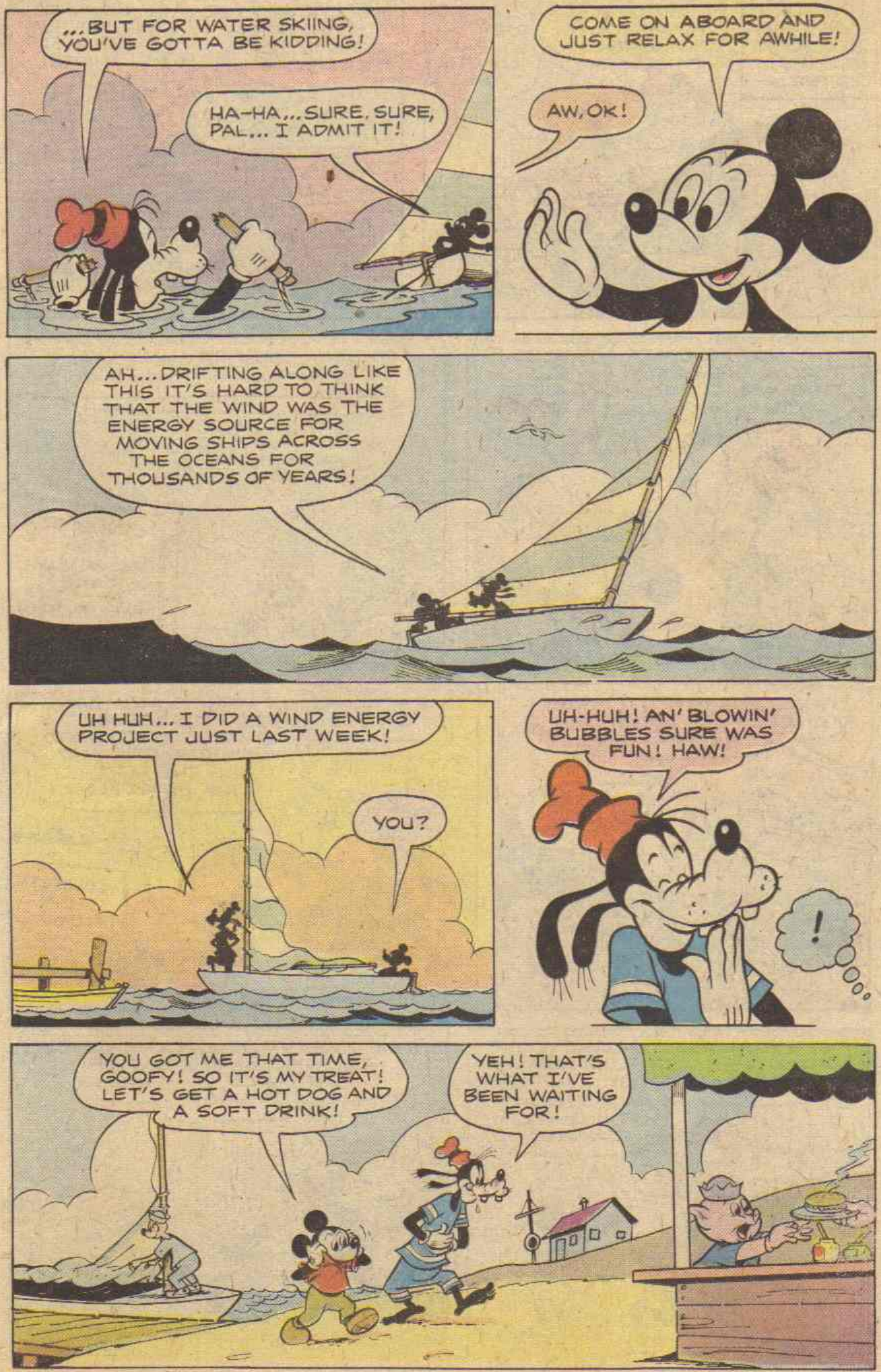

LET'S SEE...CAN YOU BRING IN YOUR CAR TOMORROW MORNING?
UH-H...SURE, IF YOU DON'T HAVE ANY NOW!
TUNE-UPS MUST BE VERY GOOD STUFF, MICKEY... IF THEY'RE ALL SOLD OUT TODAY EVEN!
HEH...YOU'LL SEE!
REGULAR TUNE-UPS CAN SAVE LOTS OF GAS IN A YEAR! YOU'LL GET NEW SPARK PLUGS AND POINTS, TOO!
POINTS?
GAWRSH! I HOPE THEY WON'T BE WHERE I SIT! I ALREADY HAVE A A SEAT SPRING THAT'S STICKING ME!
EH...GOOFY,...JACK RABBIT STARTS WASTE GAS FOR SURE! YOU KNOW A LOT DEPENDS ON THE DRIVER, TOO!
ME?
SKREE!
TO SAVE GAS, USE A SOFT FEATHER-FOOT TOUCH ON YOUR ACCELERATOR...AND GET INTO HIGH GEAR AS SOON AS YOU CAN!
I'LL NEVER GET MY FOOT TO FEEL LIKE A FEATHER ON ANYTHING!
(GASP!) YOU DON'T HAVE TO SHOW ME NOW!

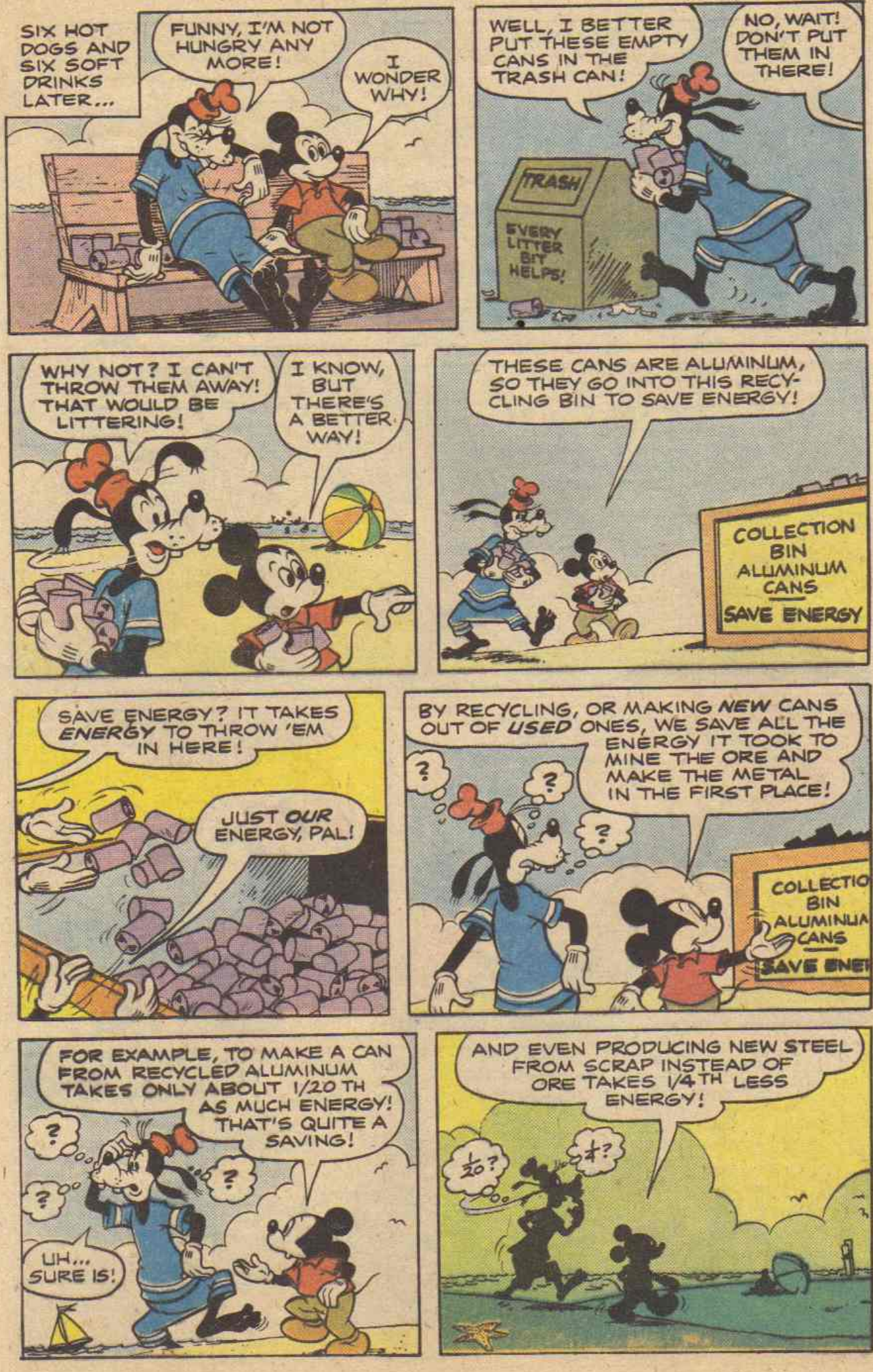
JUST IMAGINE YOU'VE GOT AN EGG BETWEEN YOUR FOOT AND THE GAS PEDAL!
(GULP!) IF IT'S ALL THE SAME, I'LL USE A HARD-BOILED EGG!
HEH... JUST SO YOU'VE GOT THE IDEA THAT SMART DRIVING BY ALL OF US CAN SAVE MILLIONS OF GALLONS OF FUEL EVERY DAY!
YOU JUST WATCH NOW, MICKEY, HOW GOOD I DRIVE!
OH, NO! TAKE IT EASY! DON'T GO SO FAST! YOU'RE JUST ASKING FOR TROUBLE!
CHUGGETY-CHUG-CHUG!
HOLD IT TO FIFTY-FIVE, AT LEAST! THE FASTER A CAR GOES, THE MORE GAS IT USES PER MILE!

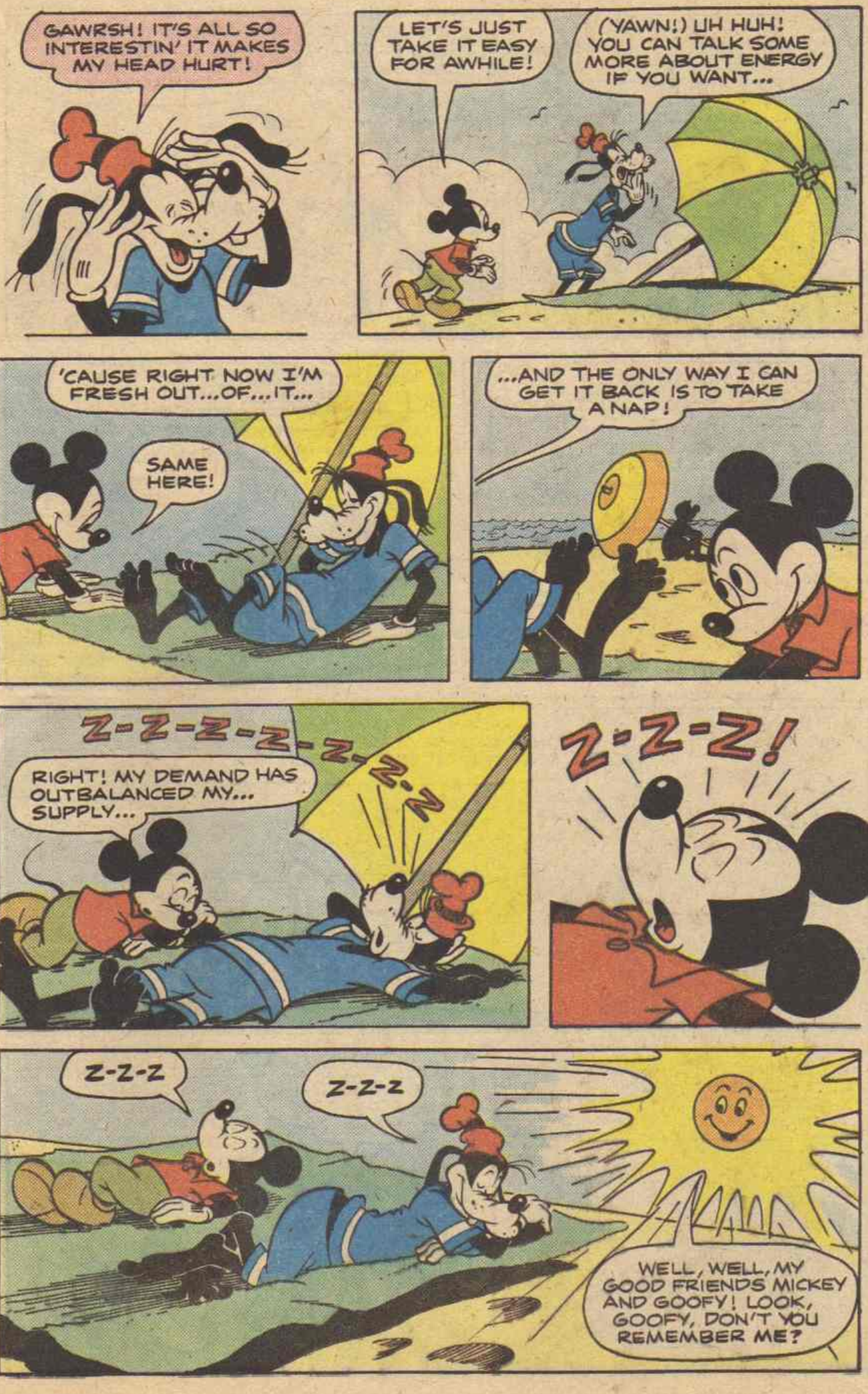
FINALLY, THE BEACH! WELL CLOSE TO IT, AT LEAST!
SURE IS POKEY TRAFFIC AROUND HERE!
UH-HUH... WHENEVER YOU KNOW YOU'RE GOING TO BE STOPPED FOR AT LEAST A MINUTE, YOU CAN SAVE GAS BY TURNING OFF YOUR MOTOR UNTIL IT'S START-UP TIME AGAIN!
PEACHY BEACH
AT LAST!
LET'S GO OVER HERE WHERE IT ISN'T SO CROWDED!
OOF... I'M COMING!
(PUFF-PUFF!) NOW I KNOW WHAT IT'S LIKE WHEN THERE ISN'T ENOUGH ENERGY TO GO AROUND!
LET'S PUT OUR CLOTHES HERE BY THE UMBRELLA!
I'LL SET UP THIS INSTANT-COMFORT CHAIR!
LET'S SEE... OOF... THIS GOES THIS... OR THAT WAY!
AND THAT WAY OR THIS WAY IS THE WAY THIS GOES!
?
OOF! UFF! M-MICKEY!..
I GUESS THEY LEFT THE INSTANT-COMFORT PART OUT OF THIS INSTANT-COMFORT CHAIR!
FORGET IT! HAHA...

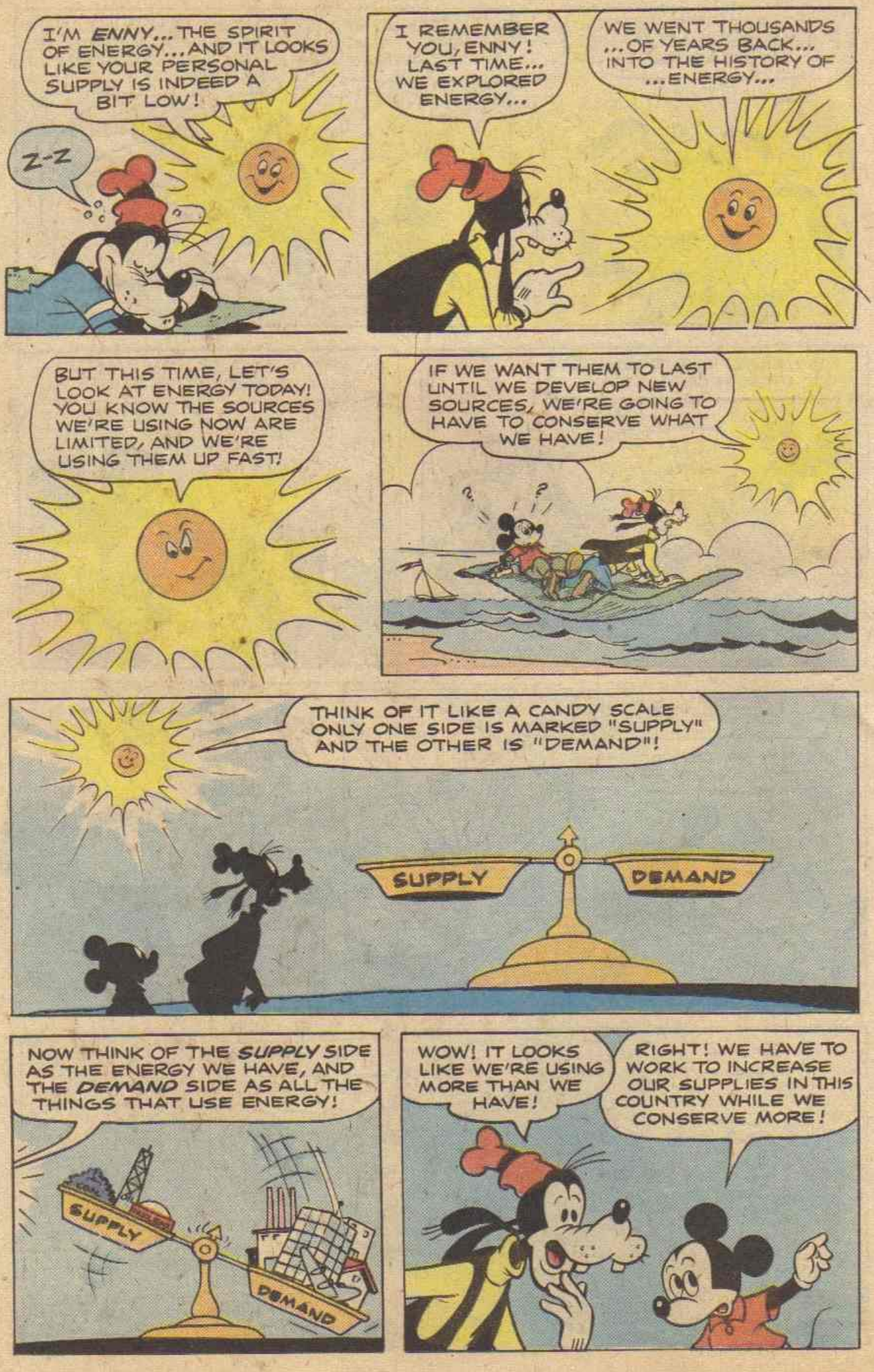

LET'S GET IN THE WATER!
OOF... GOOD IDEA!
FIRST OF ALL I'M GOING TO DO SOME EXPERT SURFING!
OOF!
YOU HAVE TO DO IT IN THE WATER, MISTER!
BUT GOOFY GETS THE HANG OF THINGS...
MICKEY! WATCH ME HANG EIGHT!
YOU'RE SUPPOSED TO HANG TEN!
YOU DO IT WITH YOUR TOES AND I'LL DO IT WITH MINE!

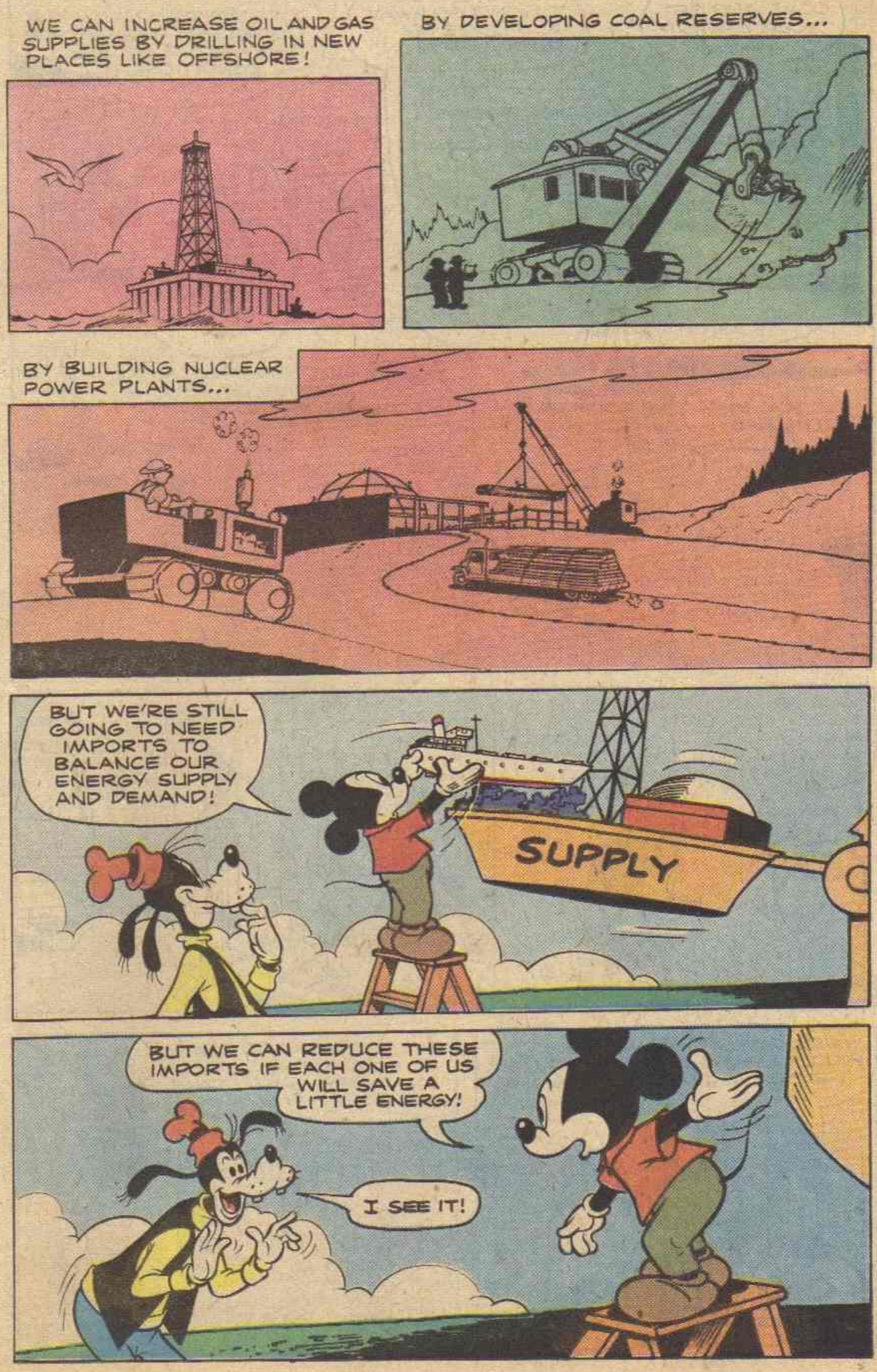

IT'S A FULL AFTERNOON FOR THE BOYS! THEY EVEN GET IN SOME BOATING AND WATER SKIING!
HOOWEE! LOOK AT ME!
AGH!
OOH!
GEE, DADDY... LOOK HOW GOOD HE WATER SKIS ON HIS NOSE!
GAWRSH... THAT WAS' FUN... (BLUB!) ...I THINK!
LET'S CHECK IN THIS SPEEDBOAT AND I'LL SHOW YOU ONE THAT'S A CHAMPION ENERGY-SAVER!
GREAT... HUH? JUST WIND POWER!
UH HUH!

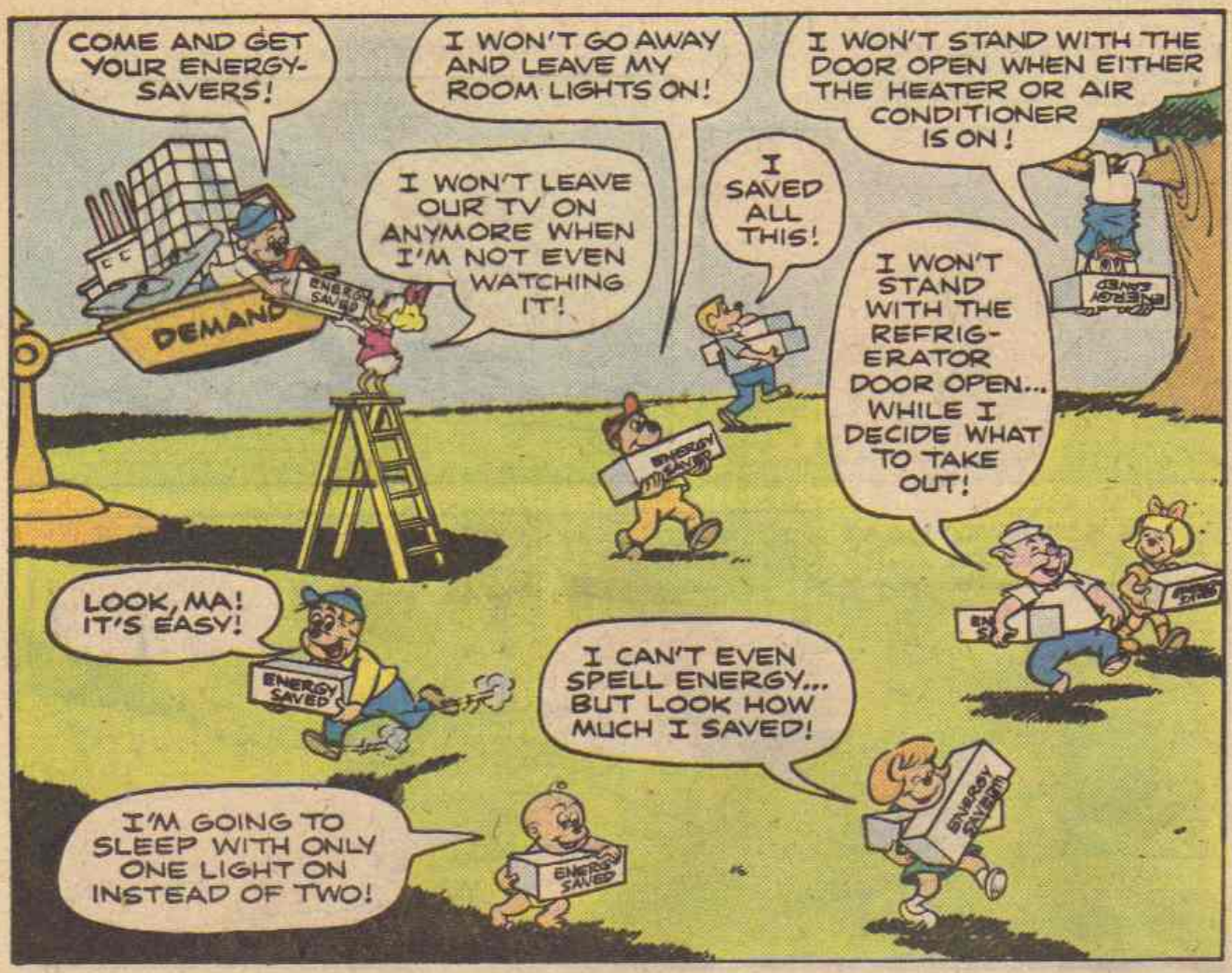

...BUT FOR WATER SKIING, YOU'VE GOTTA BE KIDDING!
HA-HA... SURE, SURE, PAL... I ADMIT IT!
COME ON ABOARD AND JUST RELAX FOR AWHILE!
AW, OK!
AH... DRIFTING ALONG LIKE THIS IT'S HARD TO THINK THAT THE WIND WAS THE ENERGY SOURCE FOR MOVING SHIPS ACROSS THE OCEANS FOR THOUSANDS OF YEARS!
UH HUH... I DID A WIND ENERGY PROJECT JUST LAST WEEK!
YOU?
UH-HUH! AN' BLOWIN' BUBBLES SURE WAS FUN! HAW!
!
YOU GOT ME THAT TIME, GOOFY! SO IT'S MY TREAT! LET'S GET A HOT DOG AND A SOFT DRINK!
YEH! THAT'S WHAT I'VE BEEN WAITING FOR!


SIX HOT DOGS AND SIX SOFT DRINKS LATER...
FUNNY, I'M NOT HUNGRY ANY MORE!
I WONDER WHY!
WELL, I BETTER PUT THESE EMPTY CANS IN THE TRASH CAN!
NO, WAIT! DON'T PUT THEM IN THERE!
TRASH
EVERY LITTER BIT HELPS!
WHY NOT? I CAN'T THROW THEM AWAY! THAT WOULD BE LITTERING!
I KNOW, BUT THERE'S A BETTER WAY!
THESE CANS ARE ALUMINUM, SO THEY GO INTO THIS RECYCLING BIN TO SAVE ENERGY!
COLLECTION BIN ALUMINUM CANS
SAVE ENERGY
SAVE ENERGY? IT TAKES ENERGY TO THROW 'EM IN HERE!
JUST OUR ENERGY, PAL!
BY RECYCLING, OR MAKING NEW CANS OUT OF USED ONES, WE SAVE ALL THE ENERGY IT TOOK TO MINE THE ORE AND MAKE THE METAL IN THE FIRST PLACE!
?
?
?
COLLECTIO BIN ALUMINUM CANS
SAVE ENE
FOR EXAMPLE, TO MAKE A CAN FROM RECYCLED ALUMINUM TAKES ONLY ABOUT 1/20 TH AS MUCH ENERGY! THAT'S QUITE A SAVING!
?
?
?
UH... SURE IS!
AND EVEN PRODUCING NEW STEEL FROM SCRAP INSTEAD OF ORE TAKES 1/4TH LESS ENERGY!
1/20?
1/4?


GAWRSH! IT'S ALL SO INTERESTIN' IT MAKES MY HEAD HURT!
LET'S JUST TAKE IT EASY FOR AWHILE!
(YAWN!) UH HUH! YOU CAN TALK SOME MORE ABOUT ENERGY IF YOU WANT...
'CAUSE RIGHT NOW I'M FRESH OUT...OF...IT...
SAME HERE!
...AND THE ONLY WAY I CAN GET IT BACK IS TO TAKE A NAP!
Z-Z-Z-Z-Z-Z-Z-Z-Z
RIGHT! MY DEMAND HAS OUTBALANCED MY... SUPPLY...
Z-Z-Z!
Z-Z-Z
Z-Z-Z
WELL, WELL, MY GOOD FRIENDS MICKEY AND GOOFY! LOOK, GOOFY, DON'T YOU REMEMBER ME?


I'M ENNY... THE SPIRIT OF ENERGY... AND IT LOOKS LIKE YOUR PERSONAL SUPPLY IS INDEED A BIT LOW!
Z-Z
I REMEMBER YOU, ENNY! LAST TIME... WE EXPLORED ENERGY...
WE WENT THOUSANDS ...OF YEARS BACK... INTO THE HISTORY OF ...ENERGY...
BUT THIS TIME, LET'S LOOK AT ENERGY TODAY! YOU KNOW THE SOURCES WE'RE USING NOW ARE LIMITED, AND WE'RE USING THEM UP FAST!
IF WE WANT THEM TO LAST UNTIL WE DEVELOP NEW SOURCES, WE'RE GOING TO HAVE TO CONSERVE WHAT WE HAVE!
THINK OF IT LIKE A CANDY SCALE ONLY ONE SIDE IS MARKED "SUPPLY" AND THE OTHER IS "DEMAND"!
SUPPLY
DEMAND
NOW THINK OF THE SUPPLY SIDE AS THE ENERGY WE HAVE, AND THE DEMAND SIDE AS ALL THE THINGS THAT USE ENERGY!
SUPPLY
DEMAND
WOW! IT LOOKS LIKE WE'RE USING MORE THAN WE HAVE!
RIGHT! WE HAVE TO WORK TO INCREASE OUR SUPPLIES IN THIS COUNTRY WHILE WE CONSERVE MORE!


WE CAN INCREASE OIL AND GAS SUPPLIES BY DRILLING IN NEW PLACES LIKE OFFSHORE!
BY DEVELOPING COAL RESERVES...
BY BUILDING NUCLEAR POWER PLANTS...
BUT WE'RE STILL GOING TO NEED IMPORTS TO BALANCE OUR ENERGY SUPPLY AND DEMAND!
SUPPLY
BUT WE CAN REDUCE THESE IMPORTS IF EACH ONE OF US WILL SAVE A LITTLE ENERGY!
I SEE IT!

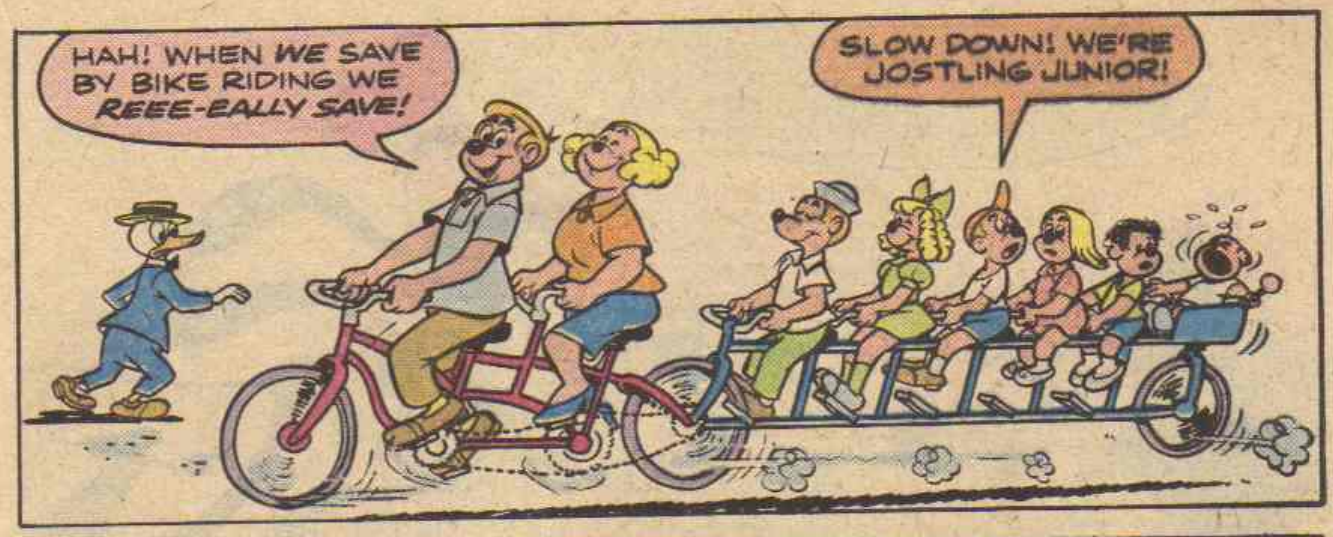

COME AND GET YOUR ENERGY-SAVERS!
I WON'T GO AWAY AND LEAVE MY ROOM LIGHTS ON!
I WON'T STAND WITH THE DOOR OPEN WHEN EITHER THE HEATER OR AIR CONDITIONER IS ON!
I WON'T LEAVE OUR TV ON ANYMORE WHEN I'M NOT EVEN WATCHING IT!
I SAVED ALL THIS!
I WON'T STAND WITH THE REFRIG-ERATOR DOOR OPEN... WHILE I DECIDE WHAT TO TAKE OUT!
DEMAND
ENERGY SAVED
LOOK, MA! IT'S EASY!
I CAN'T EVEN SPELL ENERGY... BUT LOOK HOW MUCH I SAVED!
I'M GOING TO SLEEP WITH ONLY ONE LIGHT ON INSTEAD OF TWO!

OUR FAMILY FOUND TWENTY-NINE WAYS WE COULD ALL SAVE ENERGY!
WE'VE GOT TWENTY, BUT WE'RE STILL TRYING!

I'M GOING TO START TAKING PUBLIC TRANSPORTATION TO WORK! I CAN CATCH UP ON MY KNITTING!
AND ME ON MY NAPPING!
BUS STOP

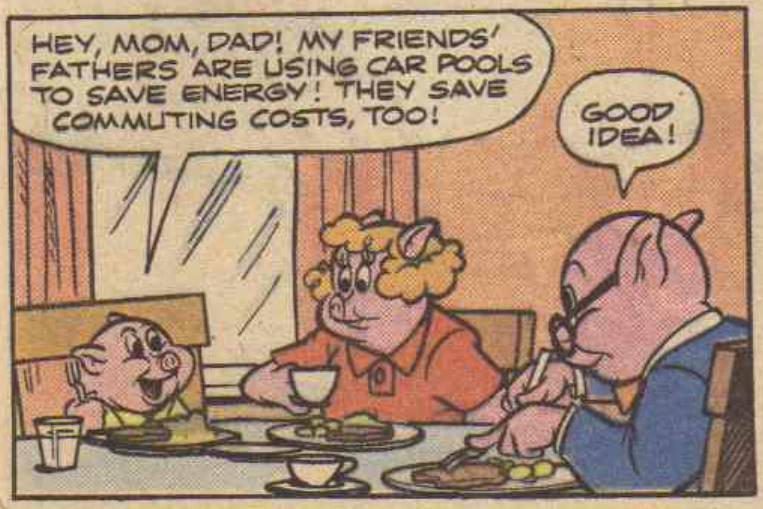
WE'RE GOING TO PUT UP AWNINGS! THEY'LL LOOK GREAT!
WE'RE JUST NOT GOING TO OVER-USE OUR AIR CONDITIONER!

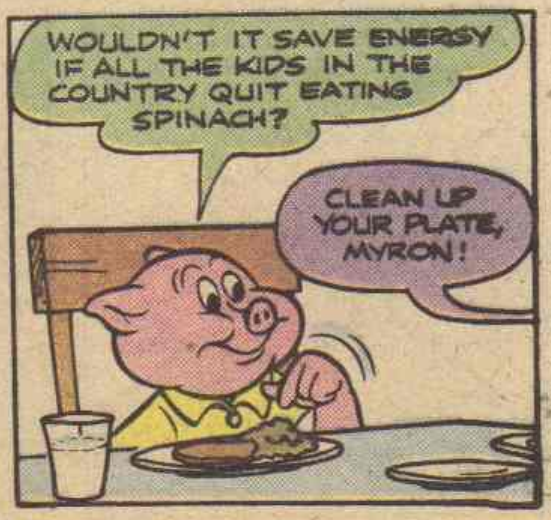
I'M NOT GOING TO ASK MY MOM TO DRIVE ME ANYWHERE THAT I CAN GET TO ON MY BIKE!
MARVIN'S A GENIUS!



THE MAN SAID WE CAN SAVE HEAT ENERGY BY WRAPPING OUR HOT WATER HEATER... BUT I DIDN'T HEAR THE REST!
WELL, HE DIDN'T SAY, "LIKE A BIRTHDAY PRESENT!"

AN INSULATING WRAP-AROUND COVER WILL REDUCE HEAT LOSS FROM A WATER HEATER.

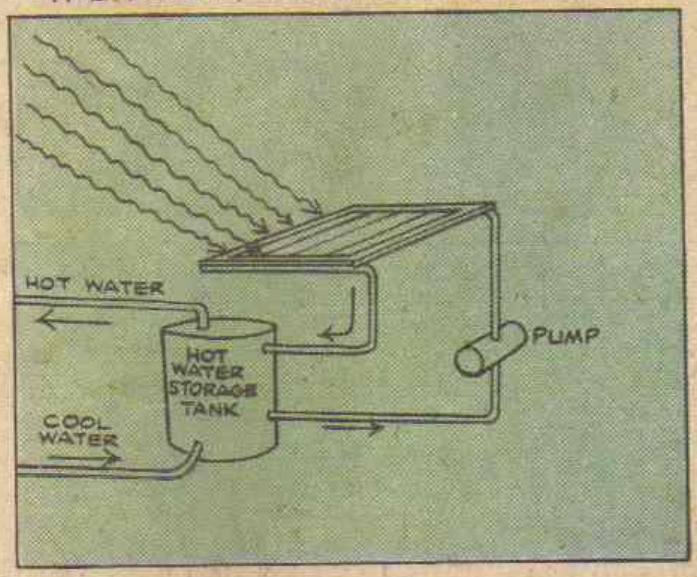




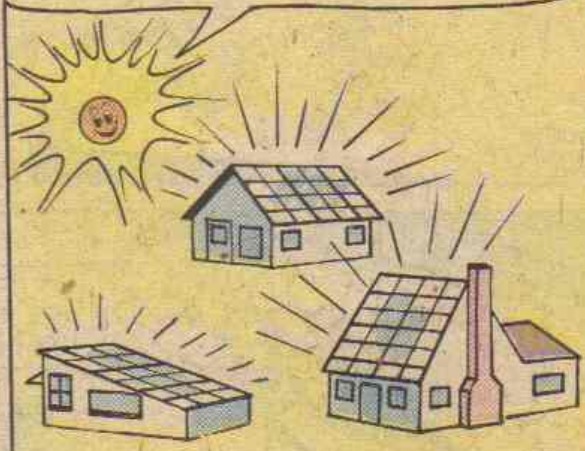
IT'S ALL JUST LIKE YOU SAID, MICKEY! IF WE ALL DO OUR PART WE CAN SAVE A LOT OF ENERGY!
THAT'S FINE FOR TODAY, BUT WHAT ABOUT THE FUTURE?
SUPPLY
DEMAND
EVEN WITH CONSERVATION, ENERGY DEMAND IS GOING TO GROW!
SUPPLY
DEMAND
IN ADDITION TO CONVENTIONAL ENERGY SOURCES LIKE OIL, COAL, AND NUCLEAR, WE'RE GOING TO HAVE TO DEVELOP OTHER SOURCES OF ENERGY LIKE SOLAR AND GEOTHERMAL!
HEY! LOOK AT THAT NEW HOUSE WITH THE SOLAR PANELS ON THE ROOF!
SOLAR PANELS?

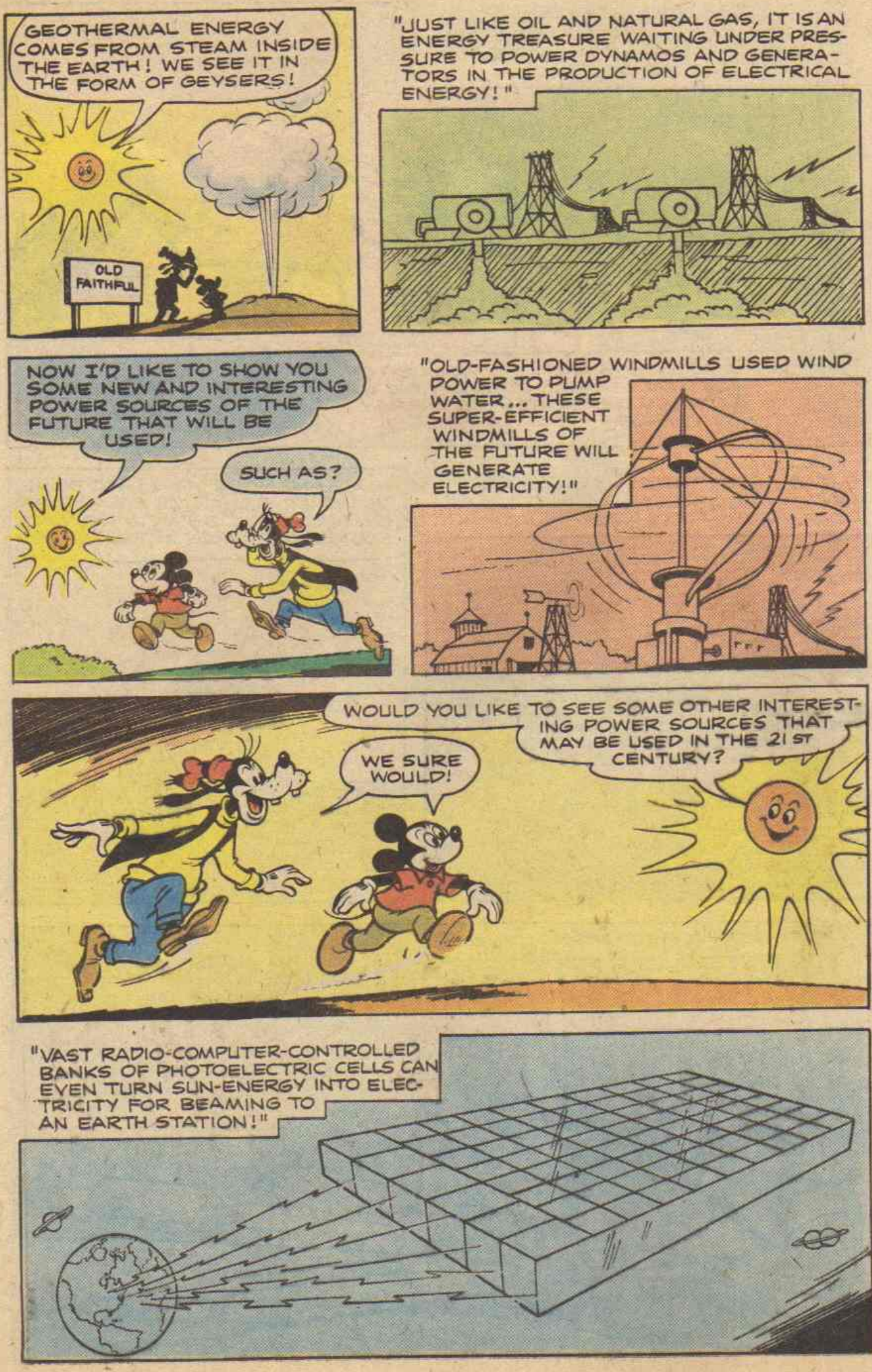
"YES! THOSE PANELS ON THE ROOF COLLECT ENERGY FROM THE SUN'S RAYS TO PROVIDE HOT WATER AND TO HEAT THE HOUSE!"

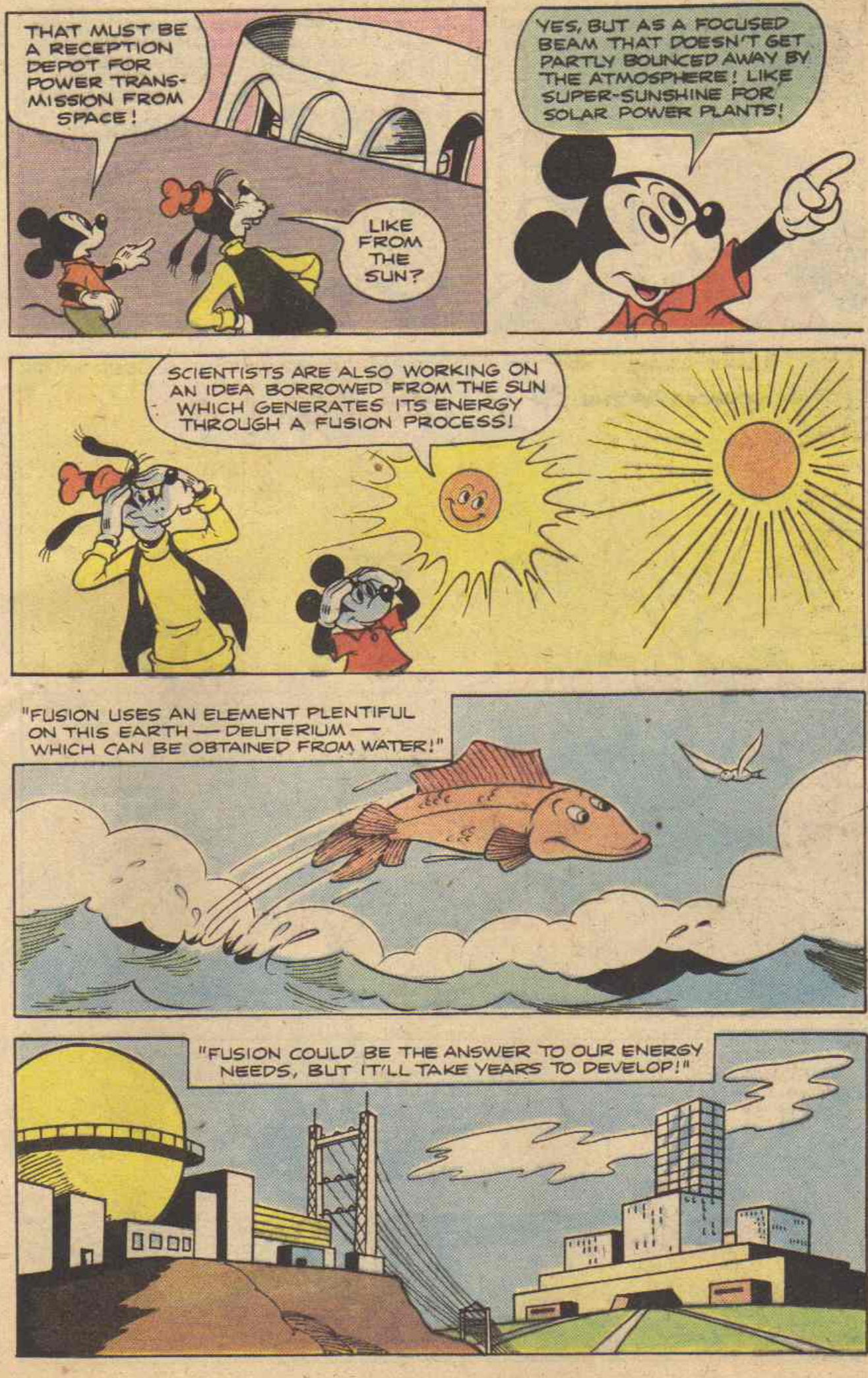
"HEAT FROM THE SUN IS ABSORBED BY WATER CIRCULATING IN COILS IN THE PANEL, AND STORED IN A TANK!"

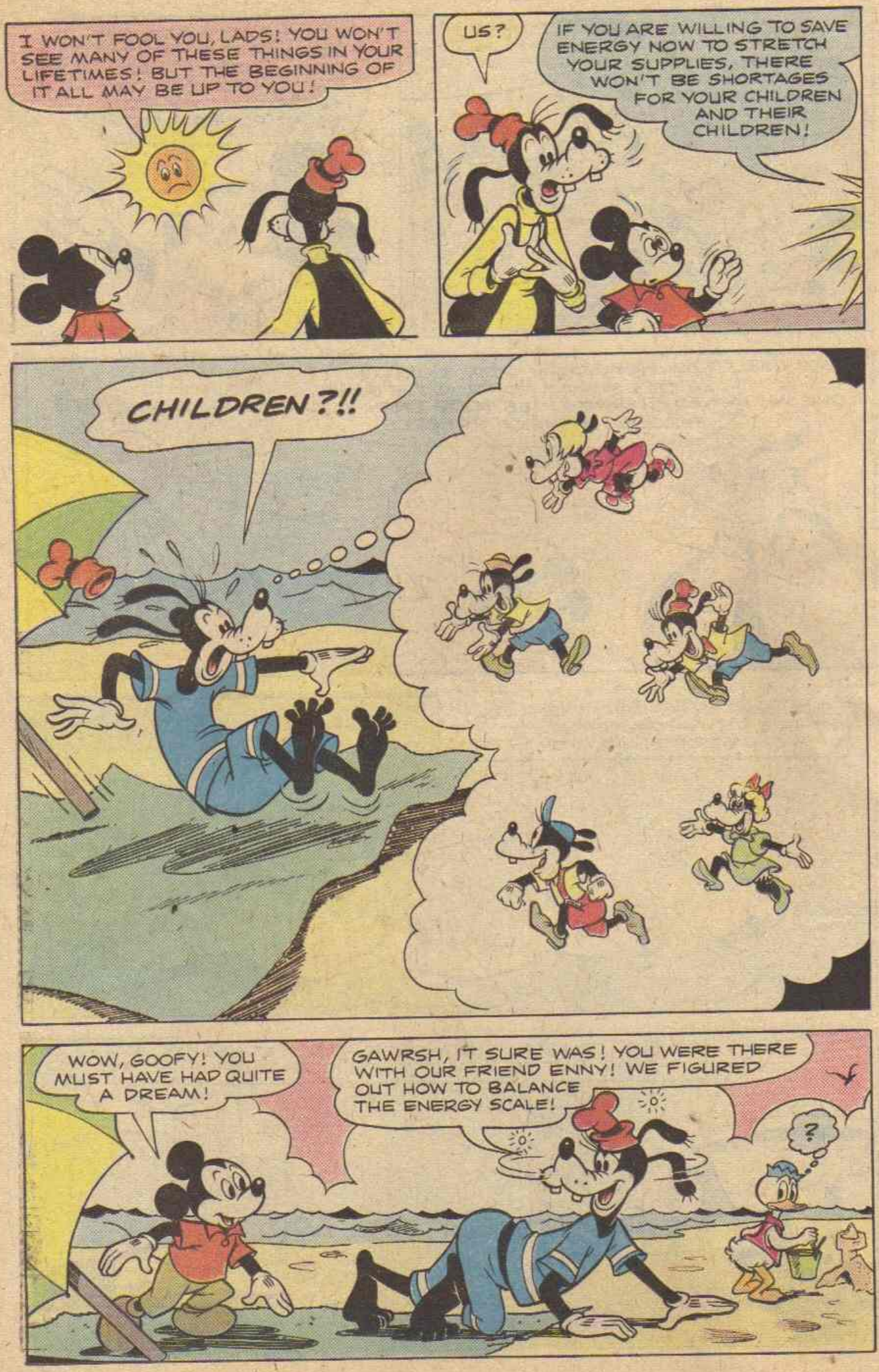


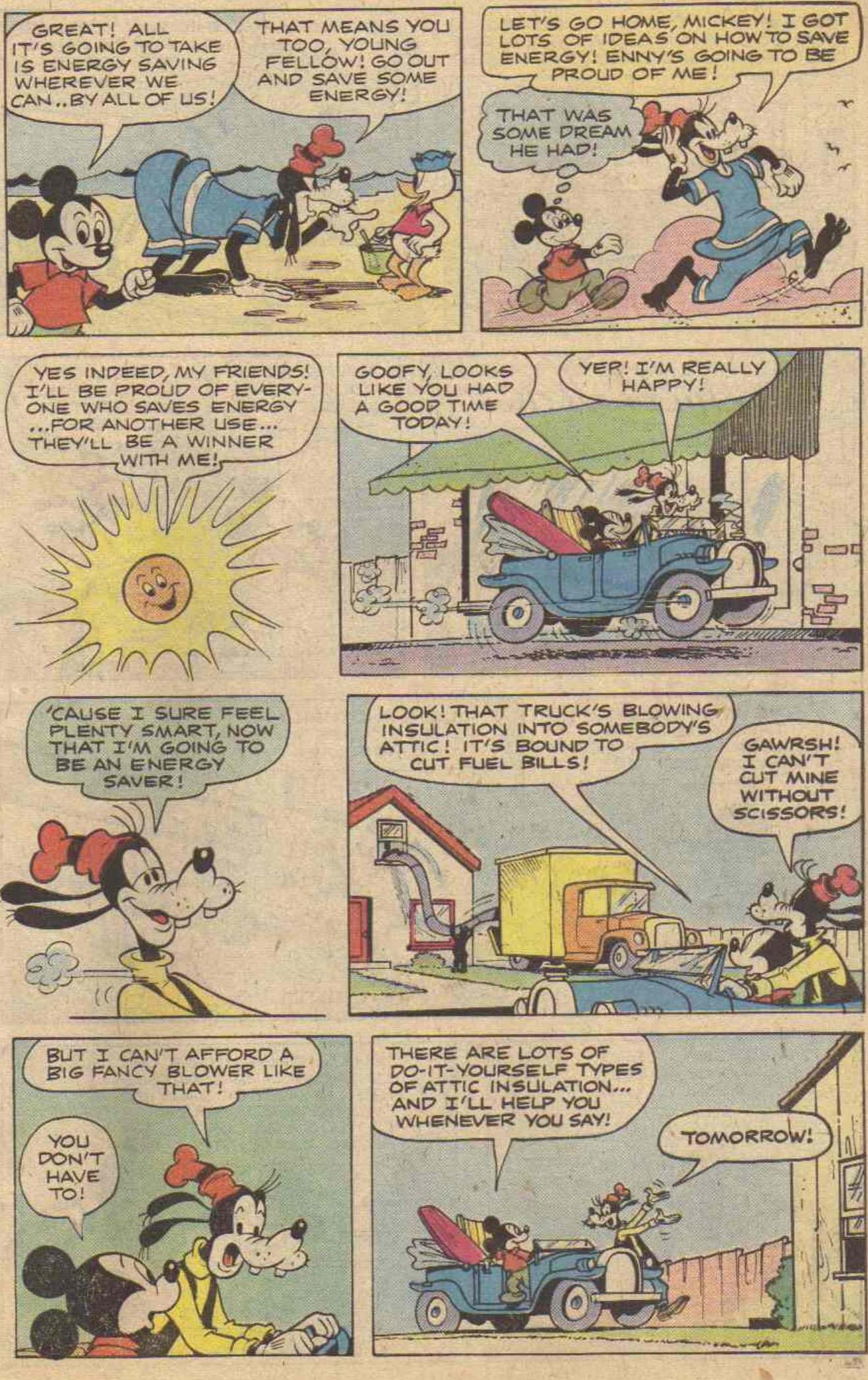
MORE AND MORE HOMES ARE BEING DESIGNED TO UTILIZE SOLAR ENERGY, WHICH WILL BE AN IMPORTANT SOURCE OF ENERGY IN THE FUTURE!

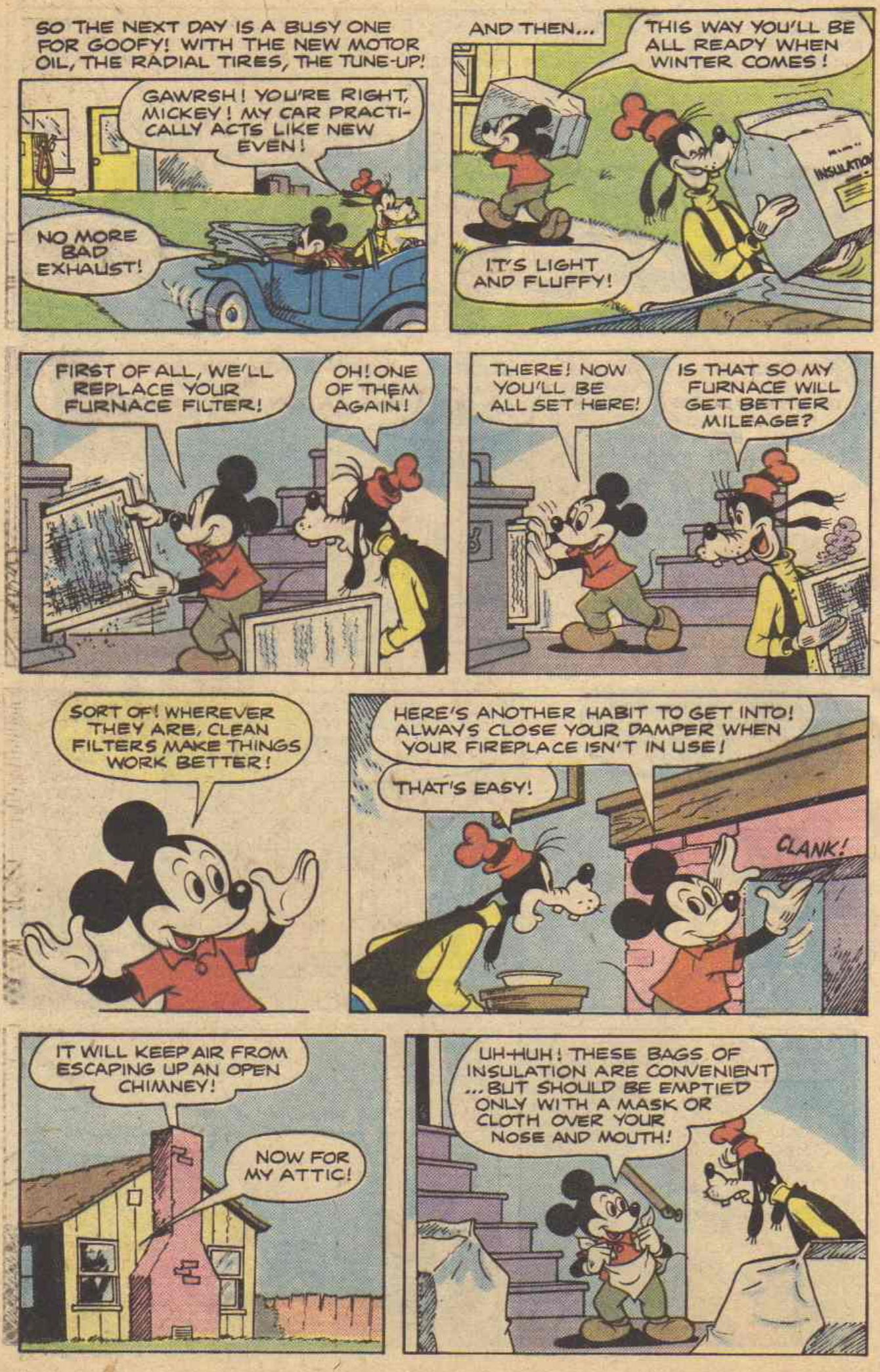


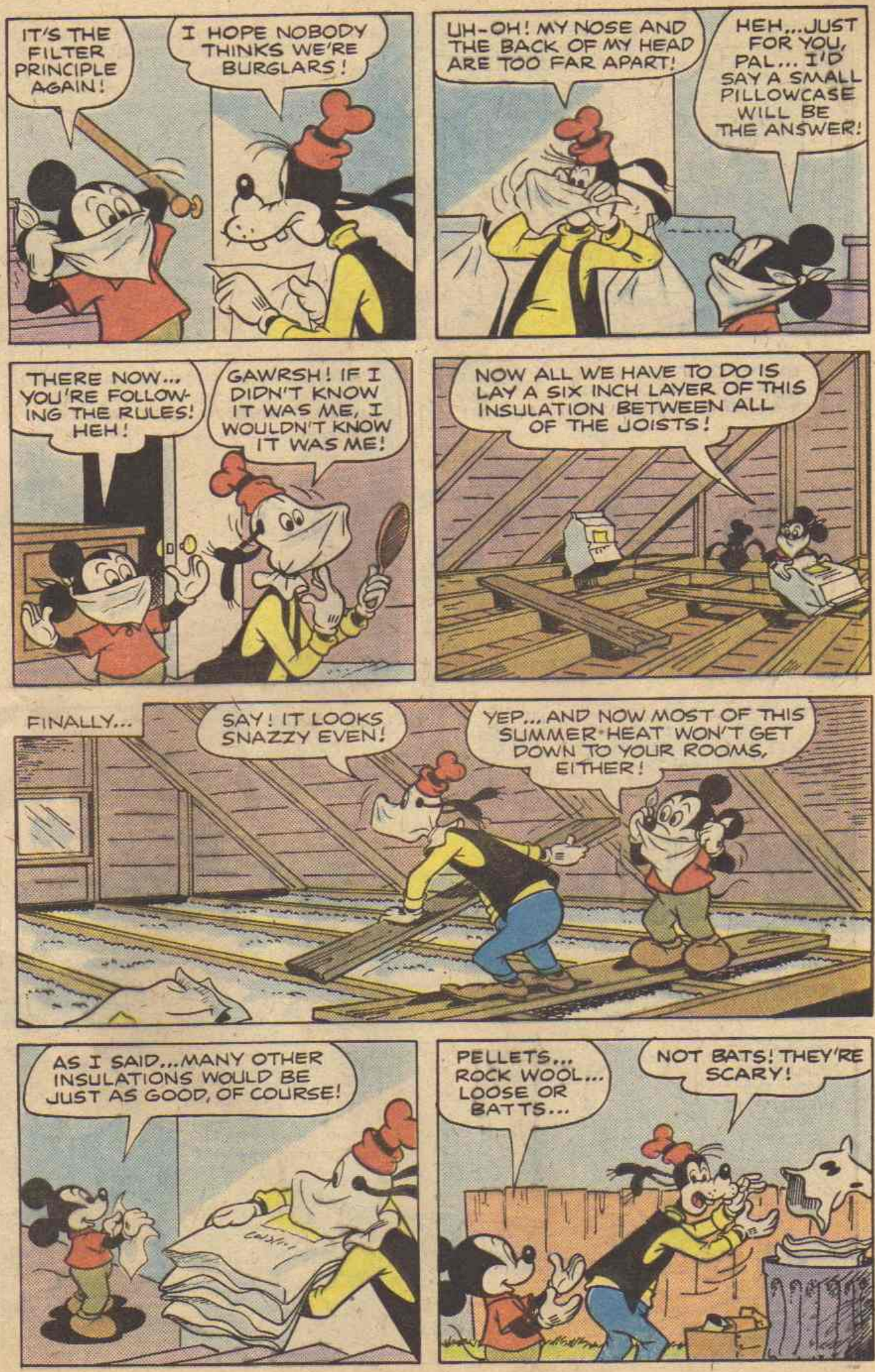

GEOTHERMAL ENERGY COMES FROM STEAM INSIDE THE EARTH! WE SEE IT IN THE FORM OF GEYSERS!
OLD FAITHFUL
"JUST LIKE OIL AND NATURAL GAS, IT IS AN ENERGY TREASURE WAITING UNDER PRESSURE TO POWER DYNAMOS AND GENERATORS IN THE PRODUCTION OF ELECTRICAL ENERGY!"
NOW I'D LIKE TO SHOW YOU SOME NEW AND INTERESTING POWER SOURCES OF THE FUTURE THAT WILL BE USED!
SUCH AS?
"OLD-FASHIONED WINDMILLS USED WIND POWER TO PUMP WATER... THESE SUPER-EFFICIENT WINDMILLS OF THE FUTURE WILL GENERATE ELECTRICITY!"
WOULD YOU LIKE TO SEE SOME OTHER INTERESTING POWER SOURCES THAT MAY BE USED IN THE 21 ST CENTURY?
WE SURE WOULD!
"VAST RADIO-COMPUTER-CONTROLLED BANKS OF PHOTOELECTRIC CELLS CAN EVEN TURN SUN-ENERGY INTO ELECTRICITY FOR BEAMING TO AN EARTH STATION!"


THAT MUST BE A RECEPTION DEPOT FOR POWER TRANS-MISSION FROM SPACE!
LIKE FROM THE SUN?
YES, BUT AS A FOCUSED BEAM THAT DOESN'T GET PARTLY BOUNCED AWAY BY THE ATMOSPHERE! LIKE SUPER-SUNSHINE FOR SOLAR POWER PLANTS!
SCIENTISTS ARE ALSO WORKING ON AN IDEA BORROWED FROM THE SUN WHICH GENERATES ITS ENERGY THROUGH A FUSION PROCESS!
"FUSION USES AN ELEMENT PLENTIFUL ON THIS EARTH — DEUTERIUM — WHICH CAN BE OBTAINED FROM WATER!"
"FUSION COULD BE THE ANSWER TO OUR ENERGY NEEDS, BUT IT'LL TAKE YEARS TO DEVELOP!"

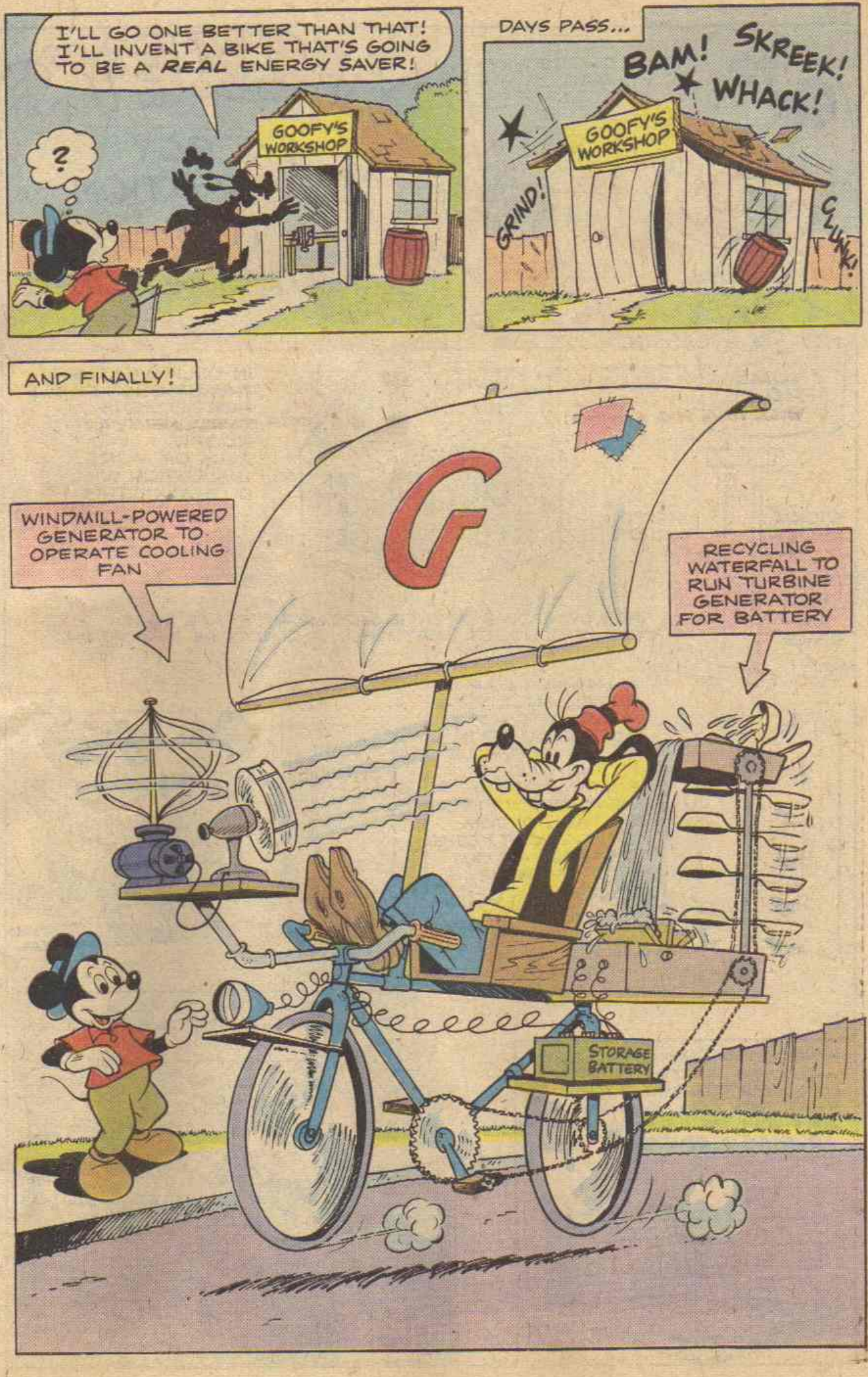

I WON'T FOOL YOU, LADS! YOU WON'T SEE MANY OF THESE THINGS IN YOUR LIFETIMES! BUT THE BEGINNING OF IT ALL MAY BE UP TO YOU!
US?
IF YOU ARE WILLING TO SAVE ENERGY NOW TO STRETCH YOUR SUPPLIES, THERE WON'T BE SHORTAGES FOR YOUR CHILDREN AND THEIR CHILDREN!
CHILDREN?!!
WOW, GOOFY! YOU MUST HAVE HAD QUITE A DREAM!
GAWRSH, IT SURE WAS! YOU WERE THERE WITH OUR FRIEND ENNY! WE FIGURED OUT HOW TO BALANCE THE ENERGY SCALE!
?

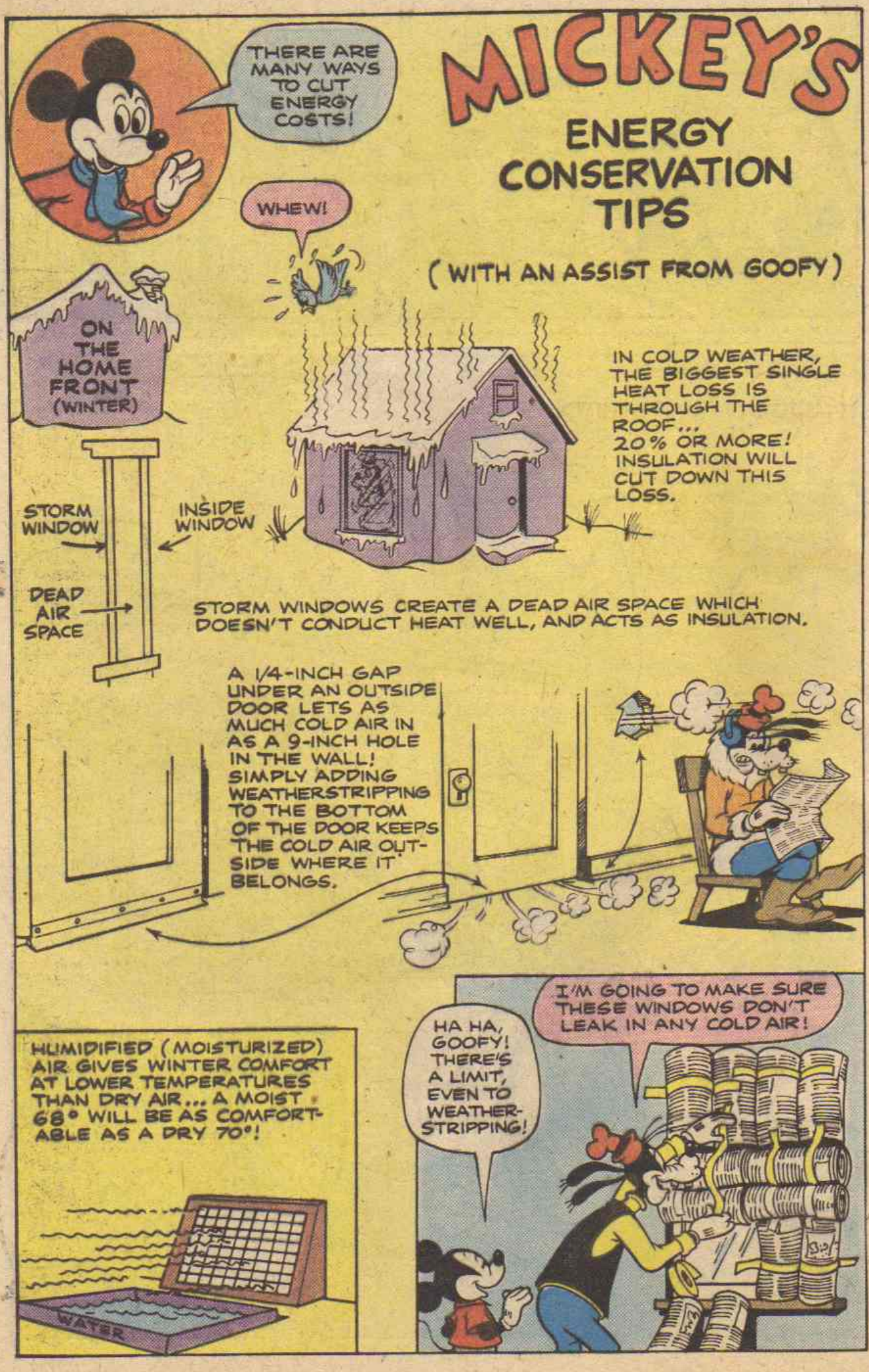

GREAT! ALL IT'S GOING TO TAKE IS ENERGY SAVING WHEREVER WE CAN..BY ALL OF US!
THAT MEANS YOU TOO, YOUNG FELLOW! GO OUT AND SAVE SOME ENERGY!
LET'S GO HOME, MICKEY! I GOT LOTS OF IDEAS ON HOW TO SAVE ENERGY! ENNY'S GOING TO BE PROUD OF ME!
THAT WAS SOME DREAM HE HAD!
YES INDEED, MY FRIENDS! I'LL BE PROUD OF EVERY-ONE WHO SAVES ENERGY ...FOR ANOTHER USE... THEY'LL BE A WINNER WITH ME!
GOOFY, LOOKS LIKE YOU HAD A GOOD TIME TODAY!
YEP! I'M REALLY HAPPY!
'CAUSE I SURE FEEL PLENTY SMART, NOW THAT I'M GOING TO BE AN ENERGY SAVER!
LOOK! THAT TRUCK'S BLOWING INSULATION INTO SOMEBODY'S ATTIC! IT'S BOUND TO CUT FUEL BILLS!
GAWRSH! I CAN'T CUT MINE WITHOUT SCISSORS!
BUT I CAN'T AFFORD A BIG FANCY BLOWER LIKE THAT!
YOU DON'T HAVE TO!
THERE ARE LOTS OF DO-IT-YOURSELF TYPES OF ATTIC INSULATION... AND I'LL HELP YOU WHENEVER YOU SAY!
TOMORROW!


SO THE NEXT DAY IS A BUSY ONE FOR GOOFY! WITH THE NEW MOTOR OIL, THE RADIAL TIRES, THE TUNE-UP!
GAWRSH! YOU'RE RIGHT, MICKEY! MY CAR PRACTICALLY ACTS LIKE NEW EVEN!
NO MORE BAD EXHAUST!
AND THEN...
THIS WAY YOU'LL BE ALL READY WHEN WINTER COMES!
INSULATION
IT'S LIGHT AND FLUFFY!
FIRST OF ALL, WE'LL REPLACE YOUR FURNACE FILTER!
OH! ONE OF THEM AGAIN!
THERE! NOW YOU'LL BE ALL SET HERE!
IS THAT SO MY FURNACE WILL GET BETTER MILEAGE?
SORT OF! WHEREVER THEY ARE, CLEAN FILTERS MAKE THINGS WORK BETTER!
HERE'S ANOTHER HABIT TO GET INTO! ALWAYS CLOSE YOUR DAMPER WHEN YOUR FIREPLACE ISN'T IN USE!
THAT'S EASY!
CLANK!
IT WILL KEEP AIR FROM ESCAPING UP AN OPEN CHIMNEY!
NOW FOR MY ATTIC!
UH-HUH! THESE BAGS OF INSULATION ARE CONVENIENT ... BUT SHOULD BE EMPTIED ONLY WITH A MASK OR CLOTH OVER YOUR NOSE AND MOUTH!

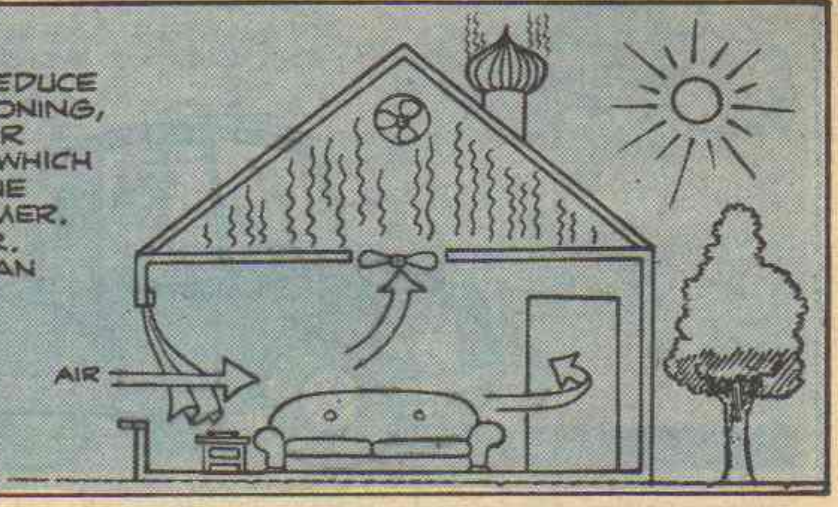

IT'S THE FILTER PRINCIPLE AGAIN!
I HOPE NOBODY THINKS WE'RE BURGLARS!
UH-OH! MY NOSE AND THE BACK OF MY HEAD ARE TOO FAR APART!
HEH...JUST FOR YOU, PAL... I'D SAY A SMALL PILLOWCASE WILL BE THE ANSWER!
THERE NOW... YOU'RE FOLLOWING THE RULES! HEH!
GAWRSH! IF I DIDN'T KNOW IT WAS ME, I WOULDN'T KNOW IT WAS ME!
NOW ALL WE HAVE TO DO IS LAY A SIX INCH LAYER OF THIS INSULATION BETWEEN ALL OF THE JOISTS!
FINALLY...
SAY! IT LOOKS SNAZZY EVEN!
YEP... AND NOW MOST OF THIS SUMMER HEAT WON'T GET DOWN TO YOUR ROOMS, EITHER!
AS I SAID... MANY OTHER INSULATIONS WOULD BE JUST AS GOOD, OF COURSE!
PELLETS... ROCK WOOL... LOOSE OR BATTS...
NOT BATS! THEY'RE SCARY!

LATER...
WHAT ARE YOU DOING NOW, PAL?
??
I'M THINKING WHAT TO DO WITH ALL THE MONEY I'LL SAVE ON MY FUEL BILLS!
SURE! CUTTING YOUR HEATING AND COOLING BILL IS A BIG SAVING!
YEH!
MAYBE IT'LL BE ENOUGH FOR A DOWN PAYMENT ON A GREAT BIG LONG SWELL NEW CAR!
WHOA, PAL!
AREN'T YOU FORGETTING ALL THAT WE LEARNED ABOUT SAVING ENERGY? A BIG CAR LIKE THAT USES AN AWFUL LOT OF GAS! AND YOU DON'T NEED ALL THAT SPACE!
UH, I GUESS YOU'RE RIGHT!
WELL I COULD PUT A SAIL ON IT, AND SAVE ENERGY ON WINDY DAYS!
G
YEAH, BUT WHAT DO YOU DO WHEN THE WIND STOPS?
UH, THAT'S A GOOD QUESTION!
WHY DON'T YOU GET YOURSELF A NICE TEN-SPEED BIKE? YOU'LL SAVE LOTS OF ENERGY!
SAY, THAT'S A GOOD IDEA!
ENERGY SAVER
10 SPEED

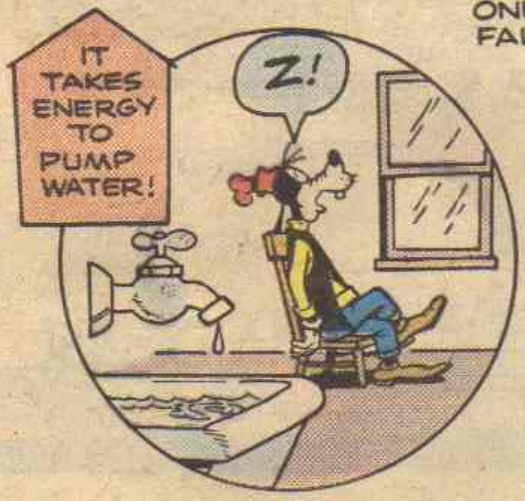

I'LL GO ONE BETTER THAN THAT! I'LL INVENT A BIKE THAT'S GOING TO BE A REAL ENERGY SAVER!
GOOFY'S WORKSHOP
?
DAYS PASS...
BAM!
SKREEK!
WHACK!
GOOFY'S WORKSHOP
GRIND!
CLUNK!
AND FINALLY!
WINDMILL-POWERED GENERATOR TO OPERATE COOLING FAN
RECYCLING WATERFALL TO RUN TURBINE GENERATOR FOR BATTERY
STORAGE BATTERY


THERE ARE MANY WAYS TO CUT ENERGY COSTS!
MICKEY'S
ENERGY CONSERVATION TIPS
(WITH AN ASSIST FROM GOOFY)
WHEW!
ON THE HOME FRONT (WINTER)
IN COLD WEATHER, THE BIGGEST SINGLE HEAT LOSS IS THROUGH THE ROOF... 20% OR MORE! INSULATION WILL CUT DOWN THIS LOSS.
STORM WINDOW
INSIDE WINDOW
DEAD AIR SPACE
STORM WINDOWS CREATE A DEAD AIR SPACE WHICH DOESN'T CONDUCT HEAT WELL, AND ACTS AS INSULATION.
A 1/4-INCH GAP UNDER AN OUTSIDE DOOR LETS AS MUCH COLD AIR IN AS A 9-INCH HOLE IN THE WALL! SIMPLY ADDING WEATHERSTRIPPING TO THE BOTTOM OF THE DOOR KEEPS THE COLD AIR OUTSIDE WHERE IT BELONGS.
I'M GOING TO MAKE SURE THESE WINDOWS DON'T LEAK IN ANY COLD AIR!
HA HA, GOOFY! THERE'S A LIMIT, EVEN TO WEATHER-STRIPPING!
HUMIDIFIED (MOISTURIZED) AIR GIVES WINTER COMFORT AT LOWER TEMPERATURES THAN DRY AIR... A MOIST 68° WILL BE AS COMFORTABLE AS A DRY 70°!
WATER

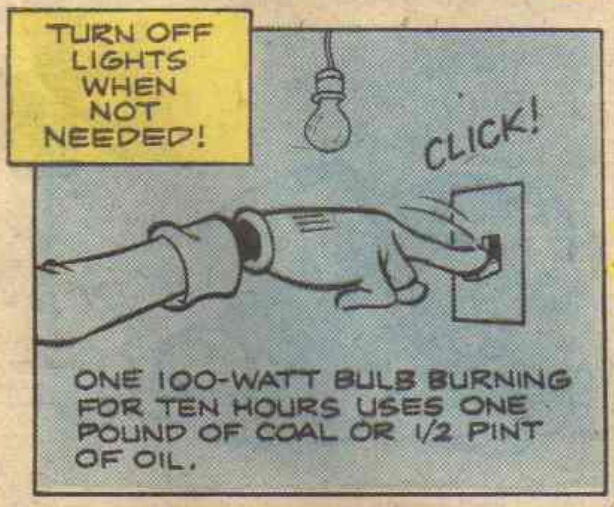
IN WARM WEATHER, TO REDUCE DEMAND ON AIR CONDITIONING, AN ATTIC FAN WILL LOWER TEMPERATURE BUILD-UP WHICH CAN REACH 160°... TURBINE VENTS ALSO HELP IN SUMMER. COVER THEM UP IN WINTER. OR... A "WHOLE HOUSE" FAN CAN MOVE COOLING AIR THROUGHOUT THE HOUSE AT ABOUT 80% LESS ENERGY COST THAN FULL AIR CONDITIONING.



ONE DROP OF WATER A SECOND FROM A LEAKY FAUCET MEANS YOU'RE LOSING 700 GALLONS OF WATER A YEAR!



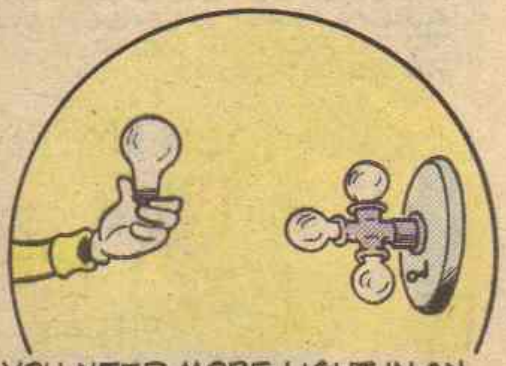
ALSO CONSIDER REPLACING INCANDESCENT BULBS WITH FLUORESCENT TUBES WHEN POSSIBLE.



ONE 100-WATT BULB BURNING FOR TEN HOURS USES ONE POUND OF COAL OR 1/2 PINT OF OIL.

ONE 40-WATT FLUORESCENT TUBE GIVES MORE LIGHT THAN A 60-WATT INCANDESCENT BULB!

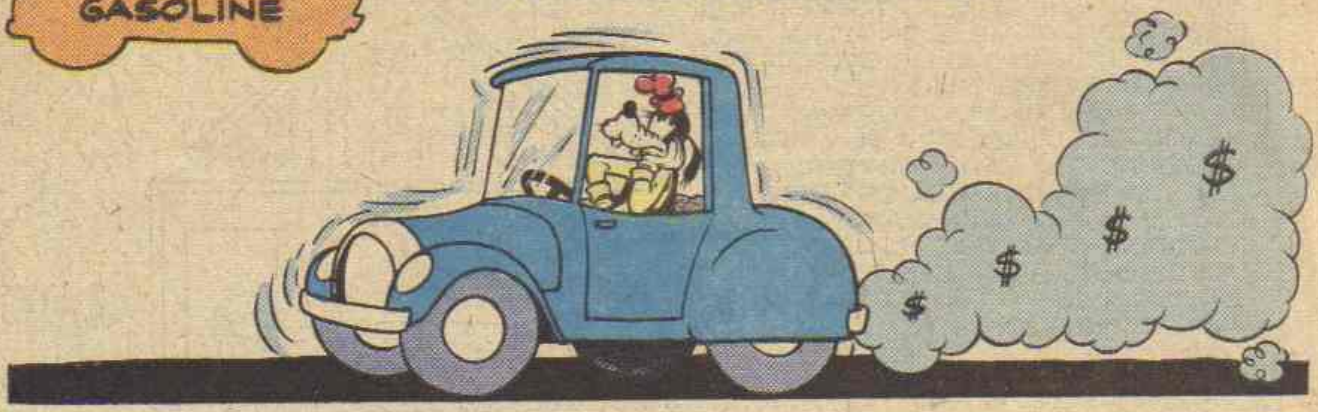
KEEP YOUR REFRIGERATOR FULL BUT NOT OVERCROWDED. A HALF-EMPTY "FRIDGE" USES *MORE* ENERGY, BECAUSE MORE COLD AIR SPILLS OUT WHEN YOU OPEN THE DOOR.



IF YOU NEED MORE LIGHT IN AN AREA FROM INCANDESCENT BULBS, USE ONE LARGE BULB INSTEAD OF SEVERAL SMALLER ONES.

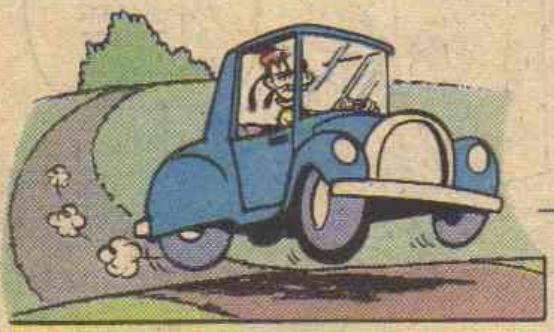
TIPS TO SAVE GASOLINE

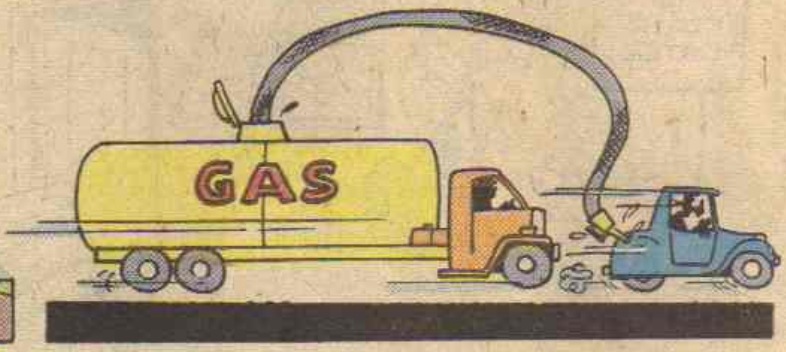
WARMING UP THE CAR IS NOT NECESSARY. IT WASTES GAS AND DOESN'T MAKE THE ENGINE MORE EFFICIENT.



THE MOST EFFECTIVE GAS-SAVING SPEEDS ARE FROM 35 TO 40 MPH.

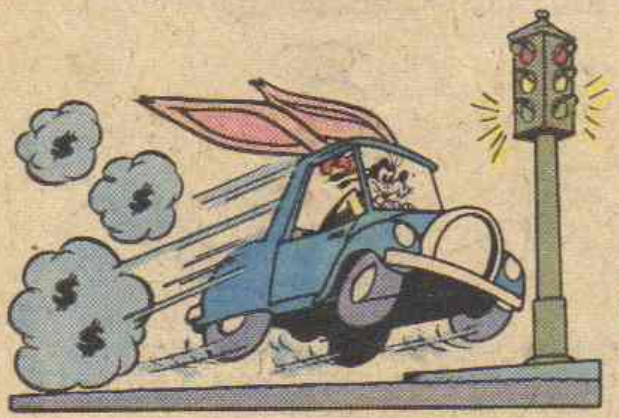
THE FASTER A CAR GOES THE MORE GAS IT USES PER MILE. AT 50 MPH, GAS MILEAGE WILL BE 20 TO 25% GREATER THAN AT 70 MPH.





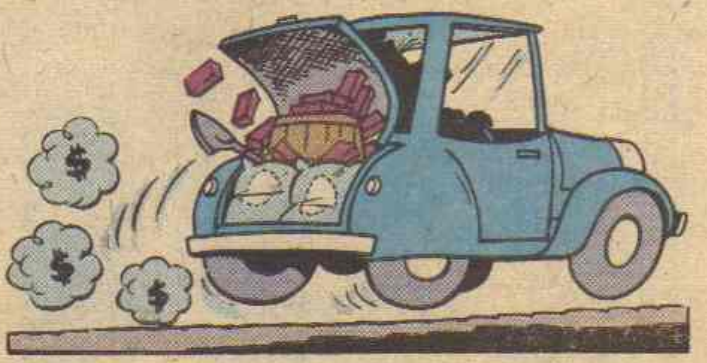
JACK RABBIT STARTS WASTE GAS...

...SO DO PANIC STOPS.

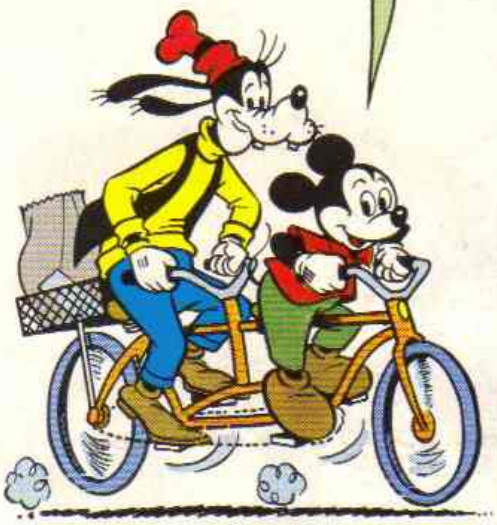


A LUGGAGE RACK ON TOP IS A REAL GAS-STEALER DUE TO INCREASED WIND RESISTANCE.

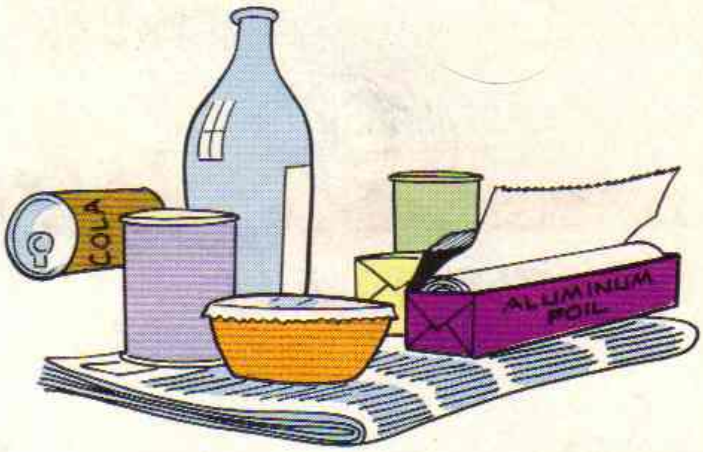
SO ARE HEAVY TOOLS CARRIED IN THE TRUNK.



AND FOR SOME GENERAL ENERGY-SAVING TIPS...



WHEN POSSIBLE BUY THINGS MADE FROM MATERIALS THAT CAN BE RECYCLED, SUCH AS GLASS, ALUMINUM, STEEL, AND PAPER.

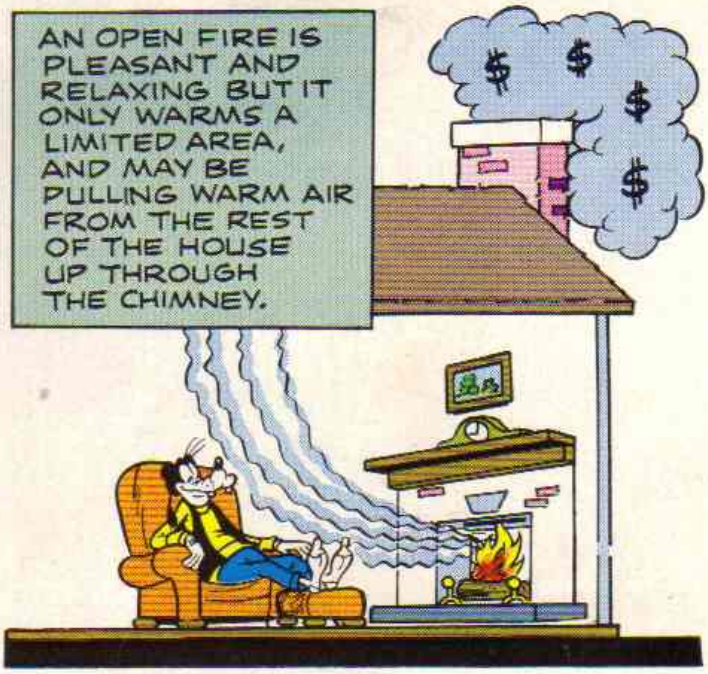


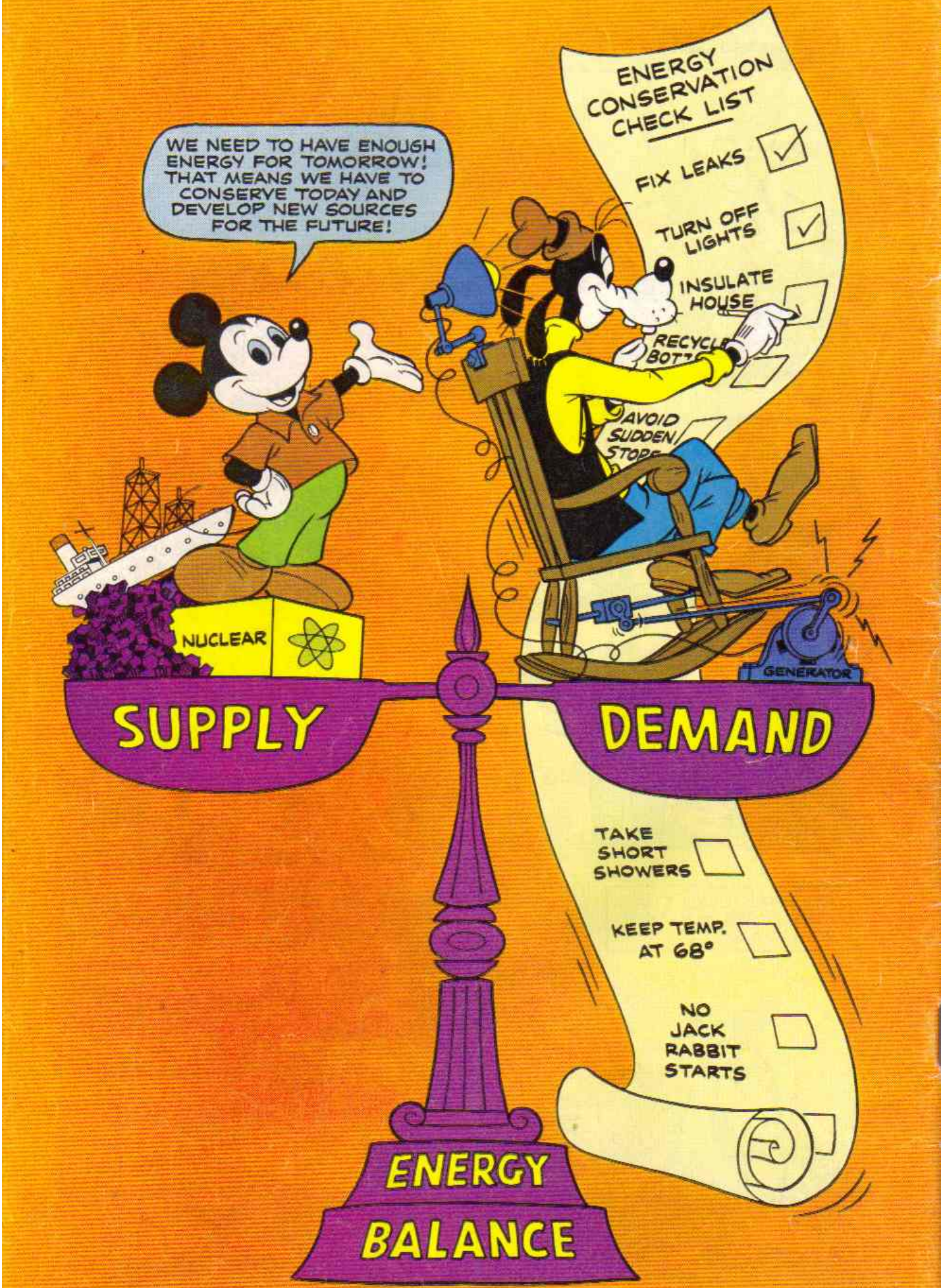
BUY FABRICS AND CLOTHES THAT NEED LITTLE OR NO IRONING.

BEFORE BUYING, EXAMINE A PRODUCT FOR INFORMATION REGARDING ENERGY CONSUMPTION.

BUY PRODUCTS THAT ARE DURABLE AND WILL LAST.

AN OPEN FIRE IS PLEASANT AND RELAXING BUT IT ONLY WARMS A LIMITED AREA, AND MAY BE PULLING WARM AIR FROM THE REST OF THE HOUSE UP THROUGH THE CHIMNEY.




WE NEED TO HAVE ENOUGH ENERGY FOR TOMORROW! THAT MEANS WE HAVE TO CONSERVE TODAY AND DEVELOP NEW SOURCES FOR THE FUTURE!
ENERGY CONSERVATION CHECK LIST
FIX LEAKS
TURN OFF LIGHTS
INSULATE HOUSE
AVOID SUDDEN
NUCLEAR
GENERATOR
SUPPLY
DEMAND
TAKE SHORT SHOWERS
KEEP TEMP. AT 68°
NO JACK RABBIT STARTS
ENERGY BALANCE